



**HAVELLS**

**enviro**  
HARNESSING LIGHT. HARVESTING ENERGY.

# LET THE SUN POWER YOUR ROOF AND BUSINESS



**HAVELLS SOLAR GRID-TIE INVERTER 1 kW TO 255 kW**



## Introduction of

# Havells

Havells India Limited is a leading Fast Moving Electrical Goods (FMEG) Company and a major power distribution equipment manufacturer with a strong global presence. Havells enjoys enviable market dominance across a wide spectrum of products, including Industrial & Domestic Circuit Protection Devices, Cables & Wires, Motors, Fans, Modular Switches, Home Appliances, Air Conditioners, Electric Water Heaters, Power Capacitors, CFL Lamps, Luminaires for Domestic, Commercial and Industrial Applications.

Today, Havells owns some of the most prestigious brands like Havells, Lloyd, Crabtree, Standard and Promptec. Its network constitutes of 4000 professionals, over 7575 dealers and 40 branches in the country. Our products are available in 40 countries. The company has twelve state-of-the-art manufacturing plants in India located at Haridwar, Baddi, Sahibabad, Faridabad, Assam, Alwar and Neemrana, manufacturing globally acclaimed products, synonymous with excellence and precision in the electrical industry.

The company pioneered the concept of exclusive brand showroom in the electrical industry with 'Havells Galaxy'. Today over 415 Havells Galaxies across the country are helping customers, both domestic and commercial, to choose from a wide variety of products for different applications. Havells became the first FMEG Company to offer door step service via its initiative 'Havells Connect'. Thanks to the quality of products and quicker service, it has minimum customer complaints and highest customer satisfaction.

Today, Havells along with its brands, have earned the distinction of being the preferred choice of electrical products for discerning individuals and industrial consumers both in India and abroad. Havells offers same quality products for both Indian and International markets. It is committed to keep powering the world with its state-of-the-art innovations and energy-efficient solutions. Currently over 90% of its product offerings are energy efficient and manufactured in-house.

Social and environmental responsibility has been at the forefront of Havells Operating Philosophy and as a result the company consistently contributes to socially responsible activities. For instance, the company is providing mid-day meal in government schools in Alwar district, covering more than 57000 students per day. The group company, QRG Healthcare runs a 140 bed hospital in Faridabad. In the past, the company has generously contributed to the society during various national calamities like the Bihar Flood, Tsunami and Kargil National Relief Fund, etc.

The essence of Havells' success lies in the expertise of its fine team of professionals, strong relationships with associates and the ability to adapt quickly & efficiently, coupled with the vision to always think ahead.

# ENVIRO GTI SINGLE PHASE AND THREE PHASE



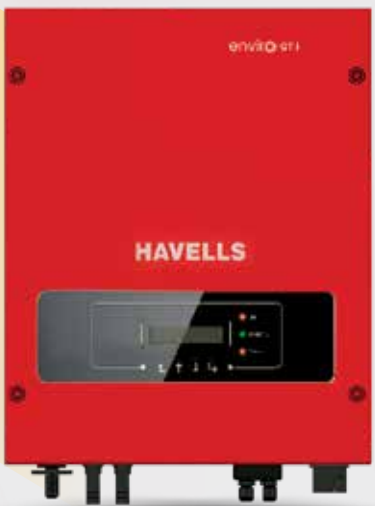
- Models - Enviro GTi 1100 NG - 1.1 kW, 2200 NG - 2.2 kW, 3000 NG - 3 kW & 3300 NG - 3.3 kW
- BIS and IEC Certified
- Single Phase Single MPPT suitable for Residential application
- High efficiency inverter up to 97.7 %
- Built-in Zero Export Feature
- WiFi / GPRS Data logger, RS485
- USB port for software update

IS 16221 (PART 2):2015/IEC 62109-2 :2011  
IS 16169 :2014/IEC 62116 :2008



R-41165239

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- Models - Enviro GTi 4000 D - 4 kW, 5000 D - 5 kW, 6000 D - 6 kW
- BIS and IEC Certified
- Single Phase DUAL MPPT suitable for Residential application
- High efficiency inverter up to 98 %
- Built-in Zero Export Feature
- WiFi / GPRS Data logger, RS485
- SD card for 25 years data storage locally

IS 16221 (PART 2):2015/IEC 62109-2 :2011  
IS 16169 :2014/IEC 62116 :2008



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- Models - Enviro GTi 4000 D - NG, 5000 D - NG, 6000 D - NG.
- IEC Certified
- High efficiency inverter up to 98.4 %
- Built-in Zero Export Feature
- 1.5 times DC Over loading per MPPT
- WiFi / GPRS Data logger USB Type
- Online Software Upgrade

# ENVIRO GTI SINGLE PHASE AND THREE PHASE



- Models - Enviro GTi 5500 TX - 5 kW, 6600 TX - 6 kW, 8800 TX - 8 kW & 11000 TX - 10 kW
- BIS and IEC Certified
- Three Phase DUAL MPPT suitable for Commercial application
- High efficiency inverter up to 98.3 %
- Built in DC Switch
- 4 inch LCD display for generation data
- WiFi / GPRS Data logger, RS485
- SD card for 25 years data storage locally
- Anti-Reverse Power control (APRC) - Optional

IS 16221 (PART 2):2015/IEC 62109-2:2011  
IS 16169 :2014/IEC 62116 :2008



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- Models - Enviro GTi 5000 TX NG - 5 kW, 6600 TX NG - 6 kW, 8800 TX NG - 8 kW, 11000 TX NG - 10 kW
- IEC Certified
- 1.5 times DC Over loading per MPPT
- High efficiency inverter up to 98.6 %
- Maximum DC input Voltage 1100 V
- Inbuilt type II-SPD for DC & AC Side
- String Level Monitoring
- Online Software Upgrade
- WiFi / GPRS Data logger USB Type



- Models - Enviro GTi 15 KT NG - 15 kW, 20 KT NG - 20 kW, 24 KT NG - 24 kW.
- IEC Certified
- 1.5 times DC Over loading per MPPT
- High efficiency inverter up to 98.6 %
- Maximum DC input Voltage 1100 V
- Inbuilt type II - SPD for DC & AC Side
- String Level Monitoring
- Online Software Upgrade
- WiFi / GPRS Data logger USB Type

IS 16221 (PART 2):2015/IEC 62109-2:2011  
IS 16169 :2014/IEC 62116 :2008



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## ENVIRO GTI SINGLE PHASE AND THREE PHASE



- Models - Enviro GTi 25 KT NG - 25 kW, 30 KT NG - 30 kW, 40 KT NG - 40 kW, 50 KT NG - 50 kW,
- IEC Certified
- 3 / 4 MPPT with 1.5 times DC Overloading
- Maximum DC input Voltage 1100 V
- High efficiency inverter up to 98.9 %
- Inbuilt type II-SPD for DC & AC Side
- String Level Monitoring
- Online Software Upgrade
- WiFi / GPRS Data logger USB Type



- Models - Enviro GTi 50 KT - 50 kW & 60 KT - 60 kW
- Three Phase THREE MPPT suitable for Commercial application
- High efficiency inverter up to 98.6 %
- Built in DC Switch, DC SPD Type II
- 4 inch LCD display for generation data
- BIS and IEC Certified
- WiFi / GPRS Data logger, RS485, RRCR Port
- SD card for 25 years data storage locally
- Anti - Reverse Power control (APRC) – Optional

IS 16221 (PART 2):2015/IEC 62109-2 :2011  
IS 16169 :2014/IEC 62116 :2008



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- Models - Enviro GTi 60 KT NG - 60 kW, 80 KT NG - 80 kW,
- IEC Certified
- 6 MPPT with 1.5 times DC Overloading
- Maximum DC input Voltage 1100 V
- High efficiency inverter up to 98.7 %
- Inbuilt type II - SPD for DC & AC Side
- String Level Monitoring
- Online Software Upgrade
- WiFi / GPRS Data logger USB Type
- Anti - Reverse Power control-Optional

## ENVIRO GTI SINGLE PHASE AND THREE PHASE



- Models - Enviro GTi 100 KT-NG- 100 kW & 110 KT-NG - 110 kW
  - IEC Certified
  - 10 MPPT with 1.5 times DC Overloading
  - Inbuilt type II - SPD for DC & AC & DC Switch
  - High efficiency inverter up to 98.7 %
  - String Level Monitoring
  - Online Software Upgrade
  - WiFi / GPRS Data logger USB Type
  - Anti - Reverse Power control-Optional
- 



- Models - GTi 255 KT-NG- 255 kW,
  - IEC Certified
  - 12 MPPT with 1.4 times DC overloading
  - Inbuilt type II - SPD for DC & AC & DC Switch
  - High efficiency inverter up to 98.7 %
  - String Level Monitoring
  - Online Software Upgrade
  - WiFi / GPRS Data logger USB Type
  - Anti - Reverse Power control-Optional
- 



- Models - GTi 255 KT-NG- 255 kW,
  - IEC Certified
  - 12 MPPT with 1.4 times DC overloading
  - Inbuilt type II - SPD for DC & AC & DC Switch
  - High efficiency inverter up to 98.7 %
  - String Level Monitoring
  - Online Software Upgrade
  - WiFi / GPRS Data logger USB Type
  - Anti - Reverse Power control-Optional
-

# TECHNICAL SPECIFICATION OF SINGLE PHASE SOLAR GRID TIE INVERTER

| DATASHEET                                       | Enviro GTi 1100 NG   | Enviro GTi 2200 NG   | Enviro GTi 3000 NG     | Enviro GTi 3300 NG     |
|---|--|----------------------|------------------------|------------------------|
| <b>Input (DC)</b>                               |  |                      |                        |                        |
| Recommended Max. PV input power                 | 1500 Wp  | 3000 Wp              | 4100 Wp                | 4500 Wp                |
| Max. Input voltage                              | 500 V  | 500 V                | 550 V                  | 550 V                  |
| Start-up voltage                                | 70 V   | 70 V                 | 70 V                   | 70 V                   |
| Rated input voltage                             | 360 V  | 360 V                | 360 V                  | 360 V                  |
| MPPT operating voltage range                    | 50 V - 500 V   | 50 V - 500 V         | 50 V - 550 V           | 50 V - 550 V           |
| Full power MPPT voltage range                   | 110 - 450 V  | 200 - 450 V          | 270-500 V              | 300 V - 500 V          |
| Max. Input current MPPT                         | 12 A   | 12 A                 | 12 A                   | 12 A                   |
| Maximun DC input short circuit current per MPPT | 15 A   | 15 A                 | 15 A                   | 15 A                   |
| Number of MPPT / String per MPPT                | 1/1  | 1/1                  | 1/1                    | 1/1                    |
| Input terminal type                             | MC4 / H4   | MC4 / H4             | MC4 / H4               | MC4 / H4               |
| <b>Output (AC)</b>                              |  |                      |                        |                        |
| Rated Power                                     | 1100 W   | 2200 W               | 3000 W                 | 3300 W                 |
| Max. AC Power                                   | 1100 VA  | 2200 VA              | 3000 VA                | 3300 VA                |
| Rated Output current                            | 4.8 A  | 9.6 A                | 13 A                   | 14.3 A                 |
| Max. Output Current                             | 5.3 A  | 10.6 A               | 14.5 A                 | 16 A                   |
| Nominal Grid Voltage                            | L / N / PE, 220 Vac, 230 Vac, 240 Vac  |                      |                        |                        |
| Grid Voltage Range                              | 180 Vac - 276 Vac (According to local standard)                                |                      |                        |                        |
| Nominal Frequency                               | 50 Hz / 60 Hz  |                      |                        |                        |
| Grid Frequency Range                            | 45~55 Hz   |                      |                        |                        |
| THDi  | <3 %   |                      |                        |                        |
| Power factor                                    | 1 default (adjustable+/- 0.8)  |                      |                        |                        |
| <b>Efficiency</b>                               |  |                      |                        |                        |
| Max. efficiency                                 | 97.5 %   | 97.5 %               | 97.7 %                 | 97.7 %                 |
| European weighted efficiency                    | 96.9 %   | 96.9 %               | 97.2 %                 | 97.2 %                 |
| Self Consumption at night                       | < 1 W  |                      |                        |                        |
| MPPT Efficiency                                 | > 99.9 %   |                      |                        |                        |
| <b>Protection</b>                               |  |                      |                        |                        |
| Anti-Islanding protection                       | Yes  |                      |                        |                        |
| DC reverse polarity protection                  | Yes  |                      |                        |                        |
| Over temp protection                            | Yes  |                      |                        |                        |
| Leakage current protection                      | Yes  |                      |                        |                        |
| Over voltage protection                         | Yes  |                      |                        |                        |
| Over current protection                         | Yes  |                      |                        |                        |
| Earth fault protection                          | Yes  |                      |                        |                        |
| SPD   | MOV: Type III standard   |                      |                        |                        |
| <b>Communication</b>                            |  |                      |                        |                        |
| Standard Communication Mode                     | RS485, WiFi/GPRS/Ethernet(optional), USB                                       |                      |                        |                        |
| <b>General Data</b>                             |  |                      |                        |                        |
| Topology  | Transformerless  |                      |                        |                        |
| Ambient temperature range                       | -30 °C~+60 °C  |                      |                        |                        |
| Allowable relative humidity range               | 0~100 %  |                      |                        |                        |
| Noise   | <25 dB   |                      |                        |                        |
| DC switch                                       | optional   |                      |                        |                        |
| Cooling   | Natural  |                      |                        |                        |
| Max. Operating altitude                         | 2000 m   |                      |                        |                        |
| Dimension [mm]                                  | 303 x 260.5 x 118 mm   | 303 x 260.5 x 118 mm | 321 x 260.5 x 131.5 mm | 321 x 260.5 x 131.5 mm |
| Support bracket                                 | Wall Mounted   |                      |                        |                        |
| Weight  | 5.5 kg   | 5.5 kg               | 6.3 kg                 | 6.3 kg                 |
| Display   | LCD+LED  |                      |                        |                        |
| Degree of protection                            | IP65   |                      |                        |                        |
| Warranty  | 10 years   |                      |                        |                        |
| <b>Standard</b>                                 |  |                      |                        |                        |
| EMC   | EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4,                        |                      |                        |                        |
| Safety standards                                | IEC 62116, IEC 61727, IEC 61683, IEC 60068 (1,2,14,30), IEC 62109-1/2          |                      |                        |                        |
| BIS Certified                                   | IS 16221 (PART 2) : 2015/IEC 62109-2 : 2011 & IS 16169 : 2014/IEC 62116 : 2008 |                      |                        |                        |

# TECHNICAL SPECIFICATION OF SINGLE PHASE SOLAR GRID TIE INVERTER

| DATASHEET                             | Enviro GTi<br>4000 D  | Enviro GTi<br>5000 D | Enviro GTi<br>6000 D |
|---------------------------------------|---|----------------------|----------------------|
| <b>Input (DC)</b>                     |   |                      |                      |
| Max. Input power                      | 5320 Wp   | 6650 Wp              | 7980 Wp              |
| Max. DC power for single MPPT         | 3500 W  | 3500 W               | 3500 W               |
| Number of independent MPPT            | 2   |                      |                      |
| Number of DC inputs                   | 1/1   |                      |                      |
| Max. input voltage                    | 600 V   |                      |                      |
| Start-up input voltage                | 120 V   |                      |                      |
| Rated input voltage                   | 360 V   |                      |                      |
| MPPT Operating voltage range          | 90 V - 580 V  |                      |                      |
| Full power MPPT voltage range         | 200 V - 520 V   | 250 V - 520 V        | 300 V - 520 V        |
| Max. input current per MPPT           | 11 A / 11 A   |                      |                      |
| Maximum DC input Isc per MPPT         | 13.2 A  |                      |                      |
| <b>Output (AC)</b>                    |   |                      |                      |
| Rated Power                           | 4000 W  | 5000 W               | 6000 W               |
| Max. AC Power                         | 4000 VA   | 5000 VA              | 6000 VA              |
| Max. Output Current                   | 18.2 A  | 22.8 A               | 27.3 A               |
| Nominal Grid Voltage                  | L / N / PE, 220 V ac, 230 V ac, 240 V ac  |                      |                      |
| Grid Voltage Range                    | 180 V ac~276 V ac (According to local standard)   |                      |                      |
| Nominal Frequency                     | 50 Hz / 60 Hz   |                      |                      |
| Grid Frequency Range                  | 45 Hz~55 Hz (According to local standard)   |                      |                      |
| Active power adjustable range         | 0~100 %   |                      |                      |
| THDi                                  | <3 %  |                      |                      |
| Power factor                          | 1 (adjustable +/- 0.8 )   |                      |                      |
| Power Limit export                    | Zero export or adjustable power limit export  |                      |                      |
| <b>Performance</b>                    |   |                      |                      |
| Max. efficiency                       | 98.0 %  |                      |                      |
| Weighted eff. (EU/CEC)                | 97.5 %  |                      |                      |
| Self-consumption at night             | <1 W  |                      |                      |
| MPPT efficiency                       | >99.9 %   |                      |                      |
| <b>Protection</b>                     |   |                      |                      |
| DC Reverse Polarity Protection Yes    | Yes   |                      |                      |
| DC Switch                             | optional  |                      |                      |
| Protection class/overvoltage category | I / III   |                      |                      |
| Input / output MOV (III)              | Yes   |                      |                      |
| Safety protection                     | Anti islanding, RCMU, Ground fault monitoring   |                      |                      |
| Certification                         | IEC 62116, IEC 61727, IEC 61683, IEC 60068 ( 1, 2, 14, 30 ),<br>IEC 62109 -1/2, IEC 61000. IP65 |                      |                      |
| SPD                                   | MOV : Type III standard   |                      |                      |
| <b>Communication</b>                  |   |                      |                      |
| Power management unit                 | According to certification and request  |                      |                      |
| Standard Communication Mode           | RS485 WiFi/GPRS ( optional ), SD card   |                      |                      |
| Operation Data Storage                | 25 years  |                      |                      |
| <b>General Data</b>                   |   |                      |                      |
| Ambient temperature range             | -25 °C~+60 °C   |                      |                      |
| Topology                              | Transformerless   |                      |                      |
| Degree of protection                  | IP65  |                      |                      |
| Allowable relative humidity range     | 0....100 %  |                      |                      |
| Max. operating altitude               | 2000 m  |                      |                      |
| Noise                                 | <25 dB  |                      |                      |
| Weight                                | 11.5 kg   |                      |                      |
| Cooling                               | Natural   |                      |                      |
| Dimension                             | 405 mm x 315 mm x 135 mm  |                      |                      |
| Display                               | LCD display   |                      |                      |
| Warranty                              | 10 years  |                      |                      |
| BIS Certified                         | IS 16221 (PART 2):2015/IEC 62109-2 :2011 & IS 16169 :2014/IEC 62116 :2008                       |                      |                      |

# TECHNICAL SPECIFICATION OF SINGLE PHASE - NG SERIES

| DATASHEET                                 | Enviro GTi<br>4000 D-NG   | Enviro GTi<br>5000 D-NG | Enviro GTi<br>6000 D-NG |
|---|---|-------------------------|-------------------------|
| <b>Input (DC)</b>                         |   |                         |                         |
| Recommended Max. PV input power           | 6000 Wp   | 7500 Wp                 | 9000 Wp                 |
| Max. DC power for single MPPT             | 3500 W  | 3750 W                  | 4500 W                  |
| Number of MPP trackers                    | 2   |                         |                         |
| Number of DC inputs                       | 1 for each MPPT   |                         |                         |
| Max. Input voltage                        | 600 V   |                         |                         |
| Start-up voltage                          | 90 V  |                         |                         |
| Rated input voltage                       | 380 V   |                         |                         |
| MPPT operating voltage range              | 80 V - 550 V  |                         |                         |
| Full power MPPT voltage range             | 200 V - 500 V   | 210 V - 500 V           | 260 V - 500 V           |
| Max. Input MPPT current                   | 15 A / 15 A   |                         |                         |
| Max. input short circuit current per MPPT | 22.5 A / 22.5 A   |                         |                         |
| <b>Output (AC)</b>                        |   |                         |                         |
| Rated Power                               | 4000 W  | 5000 W                  | 6000 W                  |
| Max. AC Power                             | 4400 VA   | 5500 VA                 | 6000 VA                 |
| Nominal output current                    | 18.2 A  | 22.7 A                  | 27.3 A                  |
| Max. Output current                       | 20 A  | 25 A                    | 29 A                    |
| Nominal grid voltage                      | L/N/PE, 220 Vac, 230 Vac, 240 Vac                                       |                         |                         |
| Grid voltage range                        | 180 Vac-276 Vac (According to local standard)                           |                         |                         |
| Nominal frequency                         | 50 Hz / 60 Hz   |                         |                         |
| Grid frequency range                      | 45 Hz - 55 Hz (According to local standard)                             |                         |                         |
| Active power adjustable range             | 0~100 %   |                         |                         |
| THDi                                      | <3 %  |                         |                         |
| Power factor                              | 1 default (adjustable+/-0. 8)   |                         |                         |
| <b>Performance</b>                        |   |                         |                         |
| Max. efficiency                           | 98.2 %  | 98.4 %                  | 98.4 %                  |
| European efficiency                       | 97.3 %  | 97.5 %                  | 97.5 %                  |
| <b>Protection</b>                         |   |                         |                         |
| DC Reverse Polarity Protection            | Yes   |                         |                         |
| DC Switch                                 | optional  |                         |                         |
| AFCI protection                           | optional  |                         |                         |
| Protection class/overvoltage category     | I / III   |                         |                         |
| Safety protection                         | Anti islanding, RCMU, Ground fault monitoring                           |                         |                         |
| SPD                                       | MOV: Type III standard  |                         |                         |
| <b>Communication</b>                      |   |                         |                         |
| Standard communication mode               | RS485 / USB, Optional: WiFi / GPRS                                      |                         |                         |
| <b>General Data</b>                       |   |                         |                         |
| Ambient temperature range                 | -30 °C~+60 °C   |                         |                         |
| Self-consumption at night                 | <1 W  |                         |                         |
| Topology                                  | Transformerless   |                         |                         |
| Degree of protection                      | IP65  |                         |                         |
| Allowable relative humidity range         | 0~100 %   |                         |                         |
| Max. Operating altitude                   | 4000 m  |                         |                         |
| Noise                                     | <25 dB  |                         |                         |
| Weight                                    | 9.2 kg  | 10 kg                   | 10 kg                   |
| Cooling                                   | Natural   |                         |                         |
| Dimension                                 | 349 mm x 344 mm x 164 mm  |                         |                         |
| Display                                   | LCD   |                         |                         |
| Warranty                                  | 10 years  |                         |                         |
| EMC                                       | EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4,                 |                         |                         |
| Safety standards                          | IEC 62116, IEC 61727, IEC 61683, IEC 60068 ( 1,2,14,30 ), IEC 62109-1/2 |                         |                         |

# TECHNICAL SPECIFICATION OF THREE PHASE SOLAR GRID TIE INVERTER

| DATASHEET                                 | Enviro GTi<br>5500TX   | Enviro GTi<br>6600TX | Enviro GTi<br>8800TX     | Enviro GTi<br>11000TX |
|---|--|----------------------|--------------------------|-----------------------|
| <b>Input (DC)</b>                         |  |                      |                          |                       |
| Typical PV Power                          | 7320 Wp  | 8780 Wp              | 11710 Wp                 | 14630 Wp              |
| Max. DC power per MPPT                    | 5700 W   | 6250 W               | 6200 W                   | 6200 W                |
| Number of independent MPPT                | 2  |                      |                          |                       |
| Number of DC inputs                       | 1 for each MPPT  |                      |                          |                       |
| Max. input voltage                        | 1000 V   |                      |                          |                       |
| Start-up input voltage                    | 200 V  |                      |                          |                       |
| Rated input voltage                       | 600 V  |                      |                          |                       |
| MPPT Operating voltage range              | 160 V - 960 V  |                      |                          |                       |
| Full Power MPPT Voltage Range             | 240 V - 850 V  | 290 V - 850 V        | 380 V - 850 V            | 480 V - 850 V         |
| Max. input current per MPPT               | 11 A / 11 A  |                      |                          |                       |
| Input short circuit current for each Mppt | 14 A   |                      |                          |                       |
| <b>Output (AC)</b>                        |  |                      |                          |                       |
| Rated Power                               | 5000 W   | 6000 W               | 8000 W                   | 10000 W               |
| Max. AC Power                             | 5500 VA  | 6600 VA              | 8800 VA                  | 11000 VA              |
| Max. Output Current                       | 8.0 A  | 9.6 A                | 12.8 A                   | 15.9 A                |
| Nominal Grid Voltage                      | 3 / N / PE, 220 V / 380 V or 3 / N / PE, 240 V / 415 V or 3 / N / PE, 230 Vac / 400 Vac    |                      |                          |                       |
| Grid Voltage Range                        | 310 Vac - 480 Vac (According to local standard)  |                      |                          |                       |
| Nominal Frequency                         | 50 Hz / 60 Hz  |                      |                          |                       |
| Grid Frequency Range                      | 45 Hz- 55 Hz (According to local standard)   |                      |                          |                       |
| Active power adjustable range             | 0~100 %  |                      |                          |                       |
| THDi                                      | <3 %   |                      |                          |                       |
| Power factor                              | 1 (adjustable +/- 0.8 )  |                      |                          |                       |
| Power limit export                        | Zero Export or adjustable power limit export   |                      |                          |                       |
| <b>Performance</b>                        |  |                      |                          |                       |
| Max. efficiency                           | 98.0 %   | 98.0 %               | 98.3 %                   |                       |
| Weighted eff. (EU/CEC)                    | 97.5 %   | 97.5 %               | 98 %                     |                       |
| Self-consumption at night                 | <1 W   |                      |                          |                       |
| MPPT efficiency                           | >99.9 %  |                      |                          |                       |
| <b>Protection</b>                         |  |                      |                          |                       |
| DC Reverse Polarity Protection            | Yes  |                      |                          |                       |
| DC Switch                                 | Yes  |                      |                          |                       |
| Safety protection                         | Anti islanding, RCMU, Ground fault monitoring  |                      |                          |                       |
| Certification                             | IEC 62116, IEC 61727, IEC 61683, IEC 60068 ( 1, 2, 14, 30 ), IEC 62109 -1/2, IEC61000 IP65 |                      |                          |                       |
| ARPC                                      | Anti Reverse Power Controller (optional)   |                      |                          |                       |
| <b>Communication</b>                      |  |                      |                          |                       |
| Power management unit                     | According to certification and request   |                      |                          |                       |
| Standard Communication Mode               | RS485 WiFi/GPRS (optional), SD card  |                      |                          |                       |
| Operation Data Storage                    | 25 years   |                      |                          |                       |
| <b>General Data</b>                       |  |                      |                          |                       |
| Ambient temperature range                 | -25 °C~+60 °C  |                      |                          |                       |
| Topology                                  | Transformerless  |                      |                          |                       |
| Degree of protection                      | IP65   |                      |                          |                       |
| Allowable relative humidity range         | 0...100 %  |                      |                          |                       |
| Max. operating altitude                   | 2000 m   |                      |                          |                       |
| Noise                                     | <29 dB   |                      |                          |                       |
| Weight                                    | 21 kg  | 21 kg                | 22 kg                    |                       |
| Cooling                                   | Natural  |                      |                          |                       |
| Dimension                                 | 457 mm x 452 mm x 202 mm   |                      | 457 mm x 452 mm x 202 mm |                       |
| Display                                   | LCD display  |                      |                          |                       |
| Warranty                                  | 10 years   |                      |                          |                       |
| BIS Certified                             | IS 16221 (PART 2): 2015/IEC 62109-2 : 2011 & IS 16169 : 2014/IEC 62116 : 2008              |                      |                          |                       |

# TECHNICAL SPECIFICATION OF THREE PHASE - NG SERIES

| DATASHEET                                 | Enviro GTi<br>5500 TX-NG   | Enviro GTi<br>6000 TX-NG | Enviro GTi<br>8800 TX-NG | Enviro GTi<br>11000 TX-NG |
|---|--|--------------------------|--------------------------|---------------------------|
| <b>Input (DC)</b>                         |  |                          |                          |                           |
| Recommended Max. PV input power           | 7500 Wp  | 9000 Wp                  | 12000 Wp                 | 15000 Wp                  |
| Number of MPP trackers                    | 2  |                          |                          |                           |
| Number of DC inputs                       | 1/1  | 1/1                      | 1/1                      | 1/1                       |
| Max. Input voltage                        | 1100 V   |                          |                          |                           |
| Start-up voltage                          | 160 V  |                          |                          |                           |
| Rated input voltage                       | 650 V  |                          |                          |                           |
| MPPT operating voltage range              | 140 V -1000 V  |                          |                          |                           |
| Full power MPPT voltage range             | 240 V - 850 V  | 290 V - 850 V            | 380 V - 850 V            | 420 V - 850 V             |
| Max. Input MPPT current                   | 15 A / 15 A  | 15 A / 15 A              | 15 A / 15 A              | 15 A / 15 A               |
| Max. input short circuit current per MPPT | 22.5 A / 22.5 A  | 22.5 A / 22.5 A          | 22.5 A / 22.5 A          | 22.5 A / 22.5 A           |
| <b>Output (AC)</b>                        |  |                          |                          |                           |
| Rated Power                               | 5000 W   | 6000 W                   | 8000 W                   | 10000 W                   |
| Max. AC Power                             | 5500 VA  | 6600 VA                  | 8800 VA                  | 11000 VA                  |
| Max. Output current                       | 8.3 A  | 10 A                     | 13.3 A                   | 16.7 A                    |
| Nominal grid voltage                      | 3 / N / PE, 220 V / 380 Vac, 230 V / 400 Vac                                   |                          |                          |                           |
| Grid voltage range                        | 310 Vac - 480 Vac ( According to local standard )                              |                          |                          |                           |
| Nominal frequency                         | 50 Hz / 60 Hz  |                          |                          |                           |
| Grid frequency range                      | 45 Hz - 55 Hz (According to local standard)                                    |                          |                          |                           |
| Active power adjustable range             | 0~100 %  |                          |                          |                           |
| THDi                                      | <3 %   |                          |                          |                           |
| Power factor                              | 1 default (adjustable+/-0. 8)  |                          |                          |                           |
| <b>Performance</b>                        |  |                          |                          |                           |
| Max. efficiency                           | 98.40 %  | 98.40 %                  | 98.50 %                  | 98.50 %                   |
| European efficiency                       | 97.50 %  | 97.50 %                  | 98.00 %                  | 98.00 %                   |
| <b>Protection</b>                         |  |                          |                          |                           |
| DC Reverse Polarity Protection            | Yes  |                          |                          |                           |
| Anti-islanding protection                 | Yes  |                          |                          |                           |
| Leakage current protection                | Yes  |                          |                          |                           |
| Ground fault monitoring                   | Yes  |                          |                          |                           |
| PV-array string fault monitoring          | Yes  |                          |                          |                           |
| Anti reverse power function               | Yes  |                          |                          |                           |
| DC switch                                 | Yes  |                          |                          |                           |
| AFCI protection                           | Optional   |                          |                          |                           |
| Input / output SPD                        | PV: type II standard, AC: type II standard                                     |                          |                          |                           |
| <b>Communication</b>                      |  |                          |                          |                           |
| Standard communication mode               | RS485 / USB / Bluetooth, Optional: WiFi / GPRS                                 |                          |                          |                           |
| <b>General Data</b>                       |  |                          |                          |                           |
| Ambient temperature range                 | -30 °C~+60 °C  |                          |                          |                           |
| Self-consumption at night                 | <1 W   |                          |                          |                           |
| Topology                                  | Transformerless  |                          |                          |                           |
| Degree of protection                      | IP65   |                          |                          |                           |
| Allowable relative humidity range         | 0~100 %  |                          |                          |                           |
| Max. Operating altitude                   | 4000 m   |                          |                          |                           |
| Noise                                     | <40 dB   |                          |                          |                           |
| Weight                                    | 17 kg  | 17 kg                    | 18 kg                    | 18 kg                     |
| Cooling                                   | Natural  |                          |                          |                           |
| Dimension                                 | 430 mm x 385 mm x 82 mm  |                          |                          |                           |
| Display                                   | LCD  |                          |                          |                           |
| Standard warranty                         | 10 years   |                          |                          |                           |
| <b>Standard</b>                           |  |                          |                          |                           |
| EMC                                       | EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12, EN61000-6-1, EN61000-6-3 |                          |                          |                           |
| Safety standards                          | IEC62109-1/2, IEC62116, IEC61727, IEC61683, IEC60068 (1,2,14,30)               |                          |                          |                           |

# TECHNICAL SPECIFICATION OF THREE PHASE - NG SERIES

| DATASHEET                                 | Enviro GTi<br>15 KT-NG   | Enviro GTi<br>20 KT-NG | Enviro GTi<br>24 KT-NG |
|---|--|------------------------|------------------------|
| <b>Input (DC)</b>                         |  |                        |                        |
| Recommended Max. PV input power           | 22500 Wp   | 30000 Wp               | 36000 Wp               |
| Number of MPPT trackers                   | 2  |                        |                        |
| Number of DC inputs                       | 2/2  |                        |                        |
| Max. Input voltage                        | 1100 V   |                        |                        |
| Start-up voltage                          | 160 V  |                        |                        |
| Rated input voltage                       | 650 V  |                        |                        |
| MPPT operating voltage range              | 140 V - 1000 V   |                        |                        |
| Full power MPPT voltage range             | 420 V - 850 V  | 480 V - 850 V          | 540 V - 850 V          |
| Max. Input MPPT current                   | 26 A / 26 A  | 26 A / 26 A            | 26 A / 26 A            |
| Max. input short circuit current per MPPT | 36 A / 36 A  | 36 A / 36 A            | 36 A / 36 A            |
| <b>Output (AC)</b>                        |  |                        |                        |
| Rated Power                               | 15000 W  | 20000 W                | 24000 W                |
| Max. AC Power                             | 16500 VA   | 22000 VA               | 26400 VA               |
| Max. Output current                       | 23.9 A   | 31.9 A                 | 38.3 A                 |
| Nominal grid voltage                      | 3 / N / PE, 220 V / 380 Vac, 230 V / 400 Vac                     |                        |                        |
| Grid voltage range                        | 310 Vac - 480 Vac ( According to local standard )                |                        |                        |
| Nominal frequency                         | 50 Hz / 60 Hz  |                        |                        |
| Grid frequency range                      | 45 Hz - 55 Hz ( According to local standard )                    |                        |                        |
| Active power adjustable range             | 0~100 %  |                        |                        |
| THDi                                      | <3 %   |                        |                        |
| Power factor                              | 1default ( adjustable +/-0. 8 )                                  |                        |                        |
| <b>Performance</b>                        |  |                        |                        |
| Max. efficiency                           | 98.60 %  |                        |                        |
| European efficiency                       | 98.20 %  |                        |                        |
| <b>Protection</b>                         |  |                        |                        |
| DC Reverse Polarity Protection            | Yes  |                        |                        |
| Anti-islanding protection                 | Yes  |                        |                        |
| Leakage current protection                | Yes  |                        |                        |
| Ground fault monitoring                   | Yes  |                        |                        |
| PV-array string fault monitoring          | Yes  |                        |                        |
| Anti reverse power function               | Optional   |                        |                        |
| DC switch                                 | Yes  |                        |                        |
| AFCl protection                           | Optional   |                        |                        |
| Input / output SPD                        | PV: type II standard, AC: type II standard                       |                        |                        |
| <b>Communication</b>                      |  |                        |                        |
| Standard communication mode               | RS485 / USB / Bluetooth, Optional: WiFi / GPRS                   |                        |                        |
| <b>General Data</b>                       |  |                        |                        |
| Ambient temperature range                 | -30 °C~+60 °C  |                        |                        |
| Self-consumption at night                 | <1 W   |                        |                        |
| Topology                                  | Transformerless  |                        |                        |
| Degree of protection                      | IP65   |                        |                        |
| Allowable relative humidity range         | 0~100 %  |                        |                        |
| Max. Operating altitude                   | 4000 m   |                        |                        |
| Noise                                     | <40 dB   |                        |                        |
| Weight                                    | 20 kg  | 22 kg                  | 23 kg                  |
| Cooling                                   | Fan  |                        |                        |
| Dimension                                 | 520 mm x 430 mm x 189 mm   |                        |                        |
| Display                                   | LCD  |                        |                        |
| Standard warranty                         | 10 years   |                        |                        |
| <b>Standard</b>                           |  |                        |                        |
| EMC                                       | EN61000-6-1, EN61000-6-3, EN61000-6-3-11, EN61000-6-3-12         |                        |                        |
| Safety standards                          | IEC62109-1/2, IEC62116, IEC61727, IEC61683, IEC60068 (1,2,14,30) |                        |                        |

# TECHNICAL SPECIFICATION OF THREE PHASE - NG SERIES

| DATASHEET                                 | Enviro GTi<br>25 KT-NG   | Enviro GTi<br>30 KT-NG | Enviro GTi<br>40 KT-NG | Enviro GTi<br>50 KT-NG |
|---|--|------------------------|------------------------|------------------------|
| <b>Input (DC)</b>                         |  |                        |                        |                        |
| Recommended Max. PV input power           | 37500 Wp   | 45000 Wp               | 60000 Wp               | 75000 Wp               |
| Max. DC power for single MPPT             | 20000 Wp   |                        |                        |                        |
| Number of MPP trackers                    | 3  | 3                      | 4                      | 4                      |
| Number of DC inputs                       | 6  | 6                      | 8                      | 8                      |
| Max. input voltage                        | 1100 V   |                        |                        |                        |
| Start-up voltage                          | 200 V  |                        |                        |                        |
| Rated input voltage                       | 620 V  | 620 V                  | 620 V                  | 620 V                  |
| MPPT operating voltage range              | 180 V - 1000 V   |                        |                        |                        |
| Full power MPPT voltage range             | 480 V - 850 V  | 480 V - 850 V          | 480 V - 850 V          | 540 V - 850 V          |
| Max. Input MPPT current                   | 3*40 A   |                        | 4*40 A                 |                        |
| Max. input short circuit current per MPPT | 3*50 A   |                        | 4*50 A                 |                        |
| <b>Output (AC)</b>                        |  |                        |                        |                        |
| Rated Power                               | 25000 W  | 30000 W                | 40000 W                | 50000 W                |
| Max. AC Power                             | 28000 VA   | 34000 VA               | 44000 VA               | 55000 VA               |
| Rated output current                      | 37.9 A   | 45.5 A                 | 60.6 A                 | 75.8 A                 |
| Max. Output current                       | 42.4 A   | 51.5 A                 | 66.7 A                 | 83.3 A                 |
| Nominal grid voltage                      | 3 / N / PE, 220 / 380 Vac, 230 / 400 Vac, 240 / 415 Vac                          |                        |                        |                        |
| Grid voltage range                        | 310 Vac - 480 Vac ( According to local standard )                                |                        |                        |                        |
| Nominal frequency                         | 50 Hz / 60 Hz  |                        |                        |                        |
| Grid frequency range                      | 45 Hz - 55 Hz ( According to local standard )                                    |                        |                        |                        |
| Active power adjustable range             | 0~100 %  |                        |                        |                        |
| THDi                                      | <3 %   |                        |                        |                        |
| Power factor                              | 1 ( adjustable+/-0.8 )   |                        |                        |                        |
| <b>Efficiency</b>                         |  |                        |                        |                        |
| Max. efficiency                           | 98.60 %  | 98.60 %                | 98.80 %                | 98.80 %                |
| European efficiency                       | 98.20 %  |                        |                        |                        |
| <b>Protection</b>                         |  |                        |                        |                        |
| DC Reverse Polarity Protection            |  |                        | Yes                    |                        |
| Anti-islanding protection                 |  |                        | Yes                    |                        |
| Leakage current protection                |  |                        | Yes                    |                        |
| Ground fault monitoring                   |  |                        | Yes                    |                        |
| PV-array string fault monitoring          |  |                        | Yes                    |                        |
| Anti reverse power function               |  |                        | Yes                    |                        |
| DC switch                                 |  |                        | Yes                    |                        |
| AFCI protection                           |  |                        | Optional               |                        |
| Anti-PID function                         |  |                        | Optional               |                        |
| Input/ output SPD                         | PV : Type II standard, AC : Type II standard                                     |                        |                        |                        |
| <b>Communication</b>                      |  |                        |                        |                        |
| Communication                             | RS485 / USB / Bluetooth, Optional: WiFi / GPRS                                   |                        |                        |                        |
| <b>General Data</b>                       |  |                        |                        |                        |
| Ambient temperature range                 | -30 °C~+60 °C  |                        |                        |                        |
| Self-consumption at night                 | <3 W   |                        |                        |                        |
| Topology                                  | Transformerless  |                        |                        |                        |
| Degree of protection                      | IP65   |                        |                        |                        |
| Allowable relative humidity range         | 0~100 %  |                        |                        |                        |
| Max. Operating altitude                   | 4000 m   |                        |                        |                        |
| Noise                                     | <60 dB   |                        |                        |                        |
| Weight                                    | 36 kg  |                        | 37 kg                  |                        |
| Cooling                                   | Fan  |                        |                        |                        |
| Dimension                                 | 585 mm x 480 mm x 220 mm   |                        |                        |                        |
| Display                                   | LCD  |                        |                        |                        |
| Standard warranty                         | 10 years   |                        |                        |                        |
| <b>Standard</b>                           |  |                        |                        |                        |
| EMC                                       | EN 61000-6-2, EN 61000-6-3, EN 61000-3-11, EN 61000-3-12                         |                        |                        |                        |
| Safety standards                          | IEC 62109-1/2, IEC 62116, IEC 61727, IEC 61683, IEC 60068 (1,2,14,30), IEC 60255 |                        |                        |                        |

# TECHNICAL SPECIFICATION OF THREE PHASE SOLAR GRID TIE INVERTER

| DATASHEET                               | ENVIRO GTi<br>50KT   | ENVIRO GTi<br>60KT          |
|---|--|-----------------------------|
| <b>Input (DC)</b>                       |  |                             |
| Max. Input Power                        | 66500 Wp   | 79800 Wp                    |
| Max DC Power for Single of MPPT         | 22000 W / 16000 W / 16000 W  | 22000 W / 22000 W / 22000 W |
| Number of independent MPPT              | 3  |                             |
| Number of DC Inputs                     | 4 / 3 / 3  | 4 / 4 / 4                   |
| Max. input voltage                      | 1000 V   |                             |
| Start-up input voltage                  | 350 V  |                             |
| Rated input voltage                     | 600 V  | 600 V                       |
| MPPT voltage range                      | 250 V - 950 V  |                             |
| Full Power MPPT voltage range           | 530 V - 800 V  | 530 V - 800 V               |
| Max. input MPPT current                 | 40 A / 30 A / 30 A   | 40 A / 40 A / 40 A          |
| Max. input current per string           | 12 A   |                             |
| Maximum DC input Isc per MPPT           | 48 A / 36 A / 36 A   | 48 A                        |
| <b>Output (AC)</b>                      |  |                             |
| Rated Power (@230 V, 50 Hz)             | 50000 W  | 60000 W                     |
| Max. AC Power                           | 50000 VA   | 60000 VA                    |
| Max. Output Current                     | 80 A   | 90 A                        |
| Nominal Grid Voltage                    | 3 / N / PE, 220 / 380 Vac, 230 / 400 Vac, 240 / 415 Vac                                  |                             |
| Grid Voltage Range                      | 310 Vac - 480 Vac ( according to local standard )  |                             |
| Nominal Frequency                       | 50 Hz / 60 Hz  |                             |
| Grid Frequency Range                    | 45 Hz - 55 Hz ( according to local standards )   |                             |
| Active power adjustable range           | 0~100 %  |                             |
| THDi                                    | <3 %   |                             |
| Power factor                            | ( adjustable +/- 0.8 )   |                             |
| <b>Performance</b>                      |  |                             |
| Max. efficiency                         | 98.5 %   | 98.6 %                      |
| European weighted efficiency            | 98.3 %   | 98.4 %                      |
| Self-consumption at night               | <1 W   |                             |
| MPPT efficiency                         | >99.9 %  |                             |
| <b>Protection</b>                       |  |                             |
| DC reverse polarity protection          | Yes  |                             |
| DC switch                               | Yes  |                             |
| Protection class / overvoltage category | I/III  |                             |
| Input/output SPD (II)                   | PV : Type II Standard, AC Type II Optional   |                             |
| Safety protection                       | Anti islanding, RCMU, Ground fault monitoring  |                             |
| Certification                           | IEC 62116, IEC 61727, IEC 61683, IEC 60068 ( 1,2,14,30 ), IEC 62109-1/2, IEC 61000 IP65. |                             |
| ARPC                                    | Anti Reverse power controller (optional)   |                             |
| <b>Communication</b>                    |  |                             |
| Power management unit                   | According to certification and request   |                             |
| Standard Communication Mode             | RS485, WiFi / GPRS (optional), SD Card, Multi-function relay                             |                             |
| Operation Data Storage                  | 25 years   |                             |
| <b>General Data</b>                     |  |                             |
| Ambient temperature range               | -25 °C...+60 °C  |                             |
| Topology                                | Transformerless  |                             |
| Degree of Protection                    | IP65   |                             |
| Allowable relative humidity range       | 0-100 %  |                             |
| Max. operating altitude                 | 4000 m   |                             |
| Noise                                   | <60 dB   | <60 dB                      |
| Weight                                  | 68 kg  | 70 kg                       |
| Cooling                                 | Fan  |                             |
| Dimension                               | 713 mm x 737 mm x 297 mm   |                             |
| Display                                 | LCD display  |                             |
| Warranty                                | 10 years   |                             |
| BIS Certified                           | IS 16221 (PART 2): 2015 / IEC 62109-2 : 2011 & IS 16169 : 2014 / IEC 62116 : 2008        |                             |


# TECHNICAL SPECIFICATION OF THREE PHASE-NG SERIES

| DATASHEET                            | Enviro GTi<br>60 KT - NG   | Enviro GTi<br>80 KT - NG |
|--------------------------------------|--|--------------------------|
| <b>Input (DC)</b>                    |  |                          |
| Recommended max. input power (Wp)    | 90000 Wp   | 120000 Wp                |
| Number of MPP trackers               | 6  |                          |
| Number of DC inputs                  | 2 per MPPT   |                          |
| Max. input voltage (V)               | 1100   |                          |
| Start-up voltage (V)                 | 200  |                          |
| Rated input voltage (V)              | 620  |                          |
| MPPT operating voltage range (V)     | 180 - 1000   |                          |
| Full power MPPT voltage range (V)    | 550 - 800  |                          |
| Max. input MPPT current (A)          | 6*32 A   | 6*40 A                   |
| Max. input short circuit current (A) | 6*50 A   | 6*60 A                   |
| <b>Output (AC)</b>                   |  |                          |
| Rated power (W)                      | 60000 W  | 80000 W                  |
| Max. AC power (VA)                   | 66000 VA   | 88000 VA                 |
| Max. output current (A)              | 100 A  | 133.3 A                  |
| Rated grid voltage                   | 3 / N / PE, 230 / 400 Vac  |                          |
| Grid voltage range                   | 310 - 480 Vac ( according to local standard )                                    |                          |
| Rated grid frequency                 | 50 / 60 Hz   |                          |
| Grid frequency range                 | 45 Hz-55 Hz ( according to local standard )                                      |                          |
| Active power adjustable range        | 0~100 %  |                          |
| THDi                                 | <3 %   |                          |
| Power factor                         | 1 default ( adjustable+ / -0.8 )   |                          |
| <b>Performance</b>                   |  |                          |
| Max. efficiency                      | 98.70 %  |                          |
| European efficiency                  | 98.20 %  |                          |
| <b>Protection</b>                    |  |                          |
| DC reverse polarity protection       | Yes  |                          |
| Anti-islanding protection            | Yes  |                          |
| Leakage current protection           | Yes  |                          |
| Ground fault monitoring              | Yes  |                          |
| PV-array string fault monitoring     | Yes  |                          |
| Anti reverse power function          | Yes  |                          |
| DC switch                            | Yes  |                          |
| Input / output SPD                   | PV: type II standard, optional: type I. AC: type II standard                     |                          |
| <b>Communication</b>                 |  |                          |
| Communication                        | RS485 / Bluetooth Optional: WiFi / Ethernet                                      |                          |
| <b>General Data</b>                  |  |                          |
| Ambient temperature range            | -25 °C...+60 °C  |                          |
| Self-consumption at night (W)        | < 2 W  |                          |
| Topology                             | Transformerless  |                          |
| Degree of protection                 | IP66   |                          |
| Allowable relative humidity range    | 0-100 %  |                          |
| Max. operating altitude              | 4000 m   |                          |
| Weight                               | 50 kg  |                          |
| Cooling                              | Fan  |                          |
| Dimension                            | 687 mm x 561 mm x 275 mm   |                          |
| Display                              | LCD  |                          |
| Standard warranty                    | 10 years   |                          |
| <b>Standard</b>                      |  |                          |
| EMC                                  | EN 61000-6-2, EN 61000-6-3, EN 61000-3-11, EN 61000-3-12                         |                          |
| Safety standards                     | IEC 62109-1/2, IEC 62116, IEC 61727, IEC 61683, IEC 60068 (1,2,14,30), IEC 60255 |                          |

# TECHNICAL SPECIFICATION OF THREE PHASE-NG SERIES

| DATASHEET                           | Enviro GTi<br>100 KT-NGA                  | Enviro GTi<br>110 KT-NGA                      | Enviro GTi<br>125 KTL-NGA                 | Enviro GTi<br>125 KT-NG                   |
|-------------------------------------|---|---|---|---|
| <b>Input (DC)</b>                   |   |   |   |   |
| Max. input voltage                  | 1100 V                                    |   |   |   |
| Rated input voltage                 | 625 V                                     |   |   |   |
| Start-up voltage                    | 200 V                                     |   |   |   |
| MPPT operating voltage range        | 180 V - 1000 V                            |   |   |   |
| Number of MPP trackers              | 10  |   |   |   |
| Number of DC inputs                 | 20  |   |   |   |
| Max. input MPPT current             | 10 × 40 A                                 |   |   |   |
| Max. input short circuit current    | 10 × 50 A                                 |   |   |   |
| <b>Output (AC)</b>                  |   |   |   |   |
| Rated output power                  | 100 kW                                    | 100 kW  | 110 kW                                    | 125 kW                                    |
| Max. apparent power                 | 100 kVA@45°C /<br>90kVA@50°C              | 110 kVA@45°C /<br>100kVA@50°C                 | 125kVA@45°C /<br>110kVA@50°C              | 125kVA@45°C /<br>110kVA@50°C              |
| Max. output current                 | 152A@380V /<br>145A@400V /<br>139.2A@415V | 167.2A@380V /<br>159.5A@400V /<br>153.1A@415V | 190A@380V /<br>181.2A@400V /<br>174A@415V | 190A@380V /<br>181.2A@400V /<br>174A@415V |
| Rated output voltage                | 3 / N / PE, 380 V / 400 V / 415 V         |   |   |   |
| Output voltage range                | 310 - 480 Vac                             |   |   |   |
| Rated output frequency              | 50 / 60 Hz                                |   |   |   |
| Output frequency range              | 45 Hz - 55 Hz / 55 Hz - 65 Hz             |   |   |   |
| Active power adjustable range       | 0-100 %                                   |   |   |   |
| THDi                                | <1% (@100%P)                              |   |   |   |
| Power factor                        | 1 (adjustable +/-0.8)                     |   |   |   |
| <b>Efficiency</b>                   |   |   |   |   |
| Max. efficiency                     | 98.6 %                                    |   |   |   |
| European efficiency                 | 98.3 %                                    |   |   |   |
| <b>Protection</b>                   |   |   |   |   |
| DC reverse polarity protection      | Yes                                       |   |   |   |
| Anti-islanding protection           | Yes                                       |   |   |   |
| Leakage current protection          | Yes                                       |   |   |   |
| Ground fault monitoring             | Yes                                       |   |   |   |
| PV-array string fault monitoring    | Yes                                       |   |   |   |
| DC switch                           | Yes                                       |   |   |   |
| AFCI                                | Yes                                       |   |   |   |
| SPD                                 | PV: type II, AC: type II                  |   |   |   |
| <b>General Data</b>                 |   |   |   |   |
| Ambient temperature range           | -30° C to +60° C                          |   |   |   |
| Topology                            | Transformerless                           |   |   |   |
| Degree of protection                | IP66                                      |   |   |   |
| Allowable relative humidity range   | 0-100 %                                   |   |   |   |
| Max. operating altitude             | 4000 m ( >3000 m derating )               |   |   |   |
| Cooling                             | Smart air cooling                         |   |   |   |
| Dimension (W×H×D)                   | 970 mm × 695 mm × 325 mm                  |   |   |   |
| Weight                              | 75 kg                                     |   |   |   |
| Display                             | LCD & Bluetooth +APP                      |   |   |   |
| Communication                       | RS485 / Wi-Fi                             |   |   |   |
| <b>Standard</b>                     |   |   |   |   |
| IEC Certified and BIS under process |   |   |   |   |

\*All specifications are subject to change without notice.

| DATASHEET                                 |  | ENVIRO GTI<br>125 KT-NG  |
|---|--|--|
| <b>Input (DC)</b>                         |  |  |
| Max. input voltage                        |  | 1100 V   |
| Rated input voltage                       |  | 625 V  |
| Start-up voltage                          |  | 550 V  |
| MPPT operating voltage range              |  | 200 V  |
| Full power MPPT voltage range             |  | 180 V~1000 V  |
| Number of MPP trackers                    |  | 10   |
| Number for DC inputs                      |  | 20   |
| Max. input current per MPPT               |  | 10* 40 A   |
| Max. input short circuit current per MPPT |  | 10* 50 A   |
| <b>Output (AC)</b>                        |  |  |
| Rated output power                        |  | 125 kW   |
| Maximum apparent power                    |  | 125 KVA @ 45 deg C / 110 KVA @ 50 deg C  |
| Max. Output current                       |  | 190 A @ 380 V / 181.2 A @ 400 V / 174A @ 415 V   |
| Nominal grid voltage                      |  | 3 / N / PE, 380 V / 400 Vac / 415 V  |
| Grid voltage range                        |  | 310 - 480 Vac  |
| Nominal frequency                         |  | 50 Hz / 60 Hz  |
| Grid frequency range                      |  | 45 Hz-55 Hz / 55 Hz - 65 Hz ( According to local standard )                                      |
| Active power adjustable range             |  | 0~100 %  |
| THDi                                      |  | <1 % ( @100%P )  |
| Power factor                              |  | 1 default ( adjustable+ / -0.8 )   |
| <b>Performance</b>                        |  |  |
| Max efficiency                            |  | 98.60 %  |
| European Weighted efficiency              |  | 98.30 %  |
| <b>Protection</b>                         |  |  |
| DC reverse polarity protection            |  | Yes  |
| Anti-islanding protection Yes             |  | Yes  |
| Leakage current protection                |  | Yes  |
| Ground fault monitoring Yes               |  | Yes  |
| PV-array string fault monitoring          |  | Yes  |
| DC switch                                 |  | Yes  |
| AFCI                                      |  | Yes  |
| Input/ Output SPD PV:                     |  | type II standard, AC: type II standard   |
| Certifications* (applied)                 |  | "IEC 61727, IEC 61683, IEC 62116, IEC 60068, IEC 61000, IEC 62109, IP 65 "                       |
| <b>Communication</b>                      |  |  |
| Power management unit                     |  | According to certification and request   |
| Communication                             |  | RS485 / WiFi   |
| <b>General Data</b>                       |  |  |
| Ambient temperature range                 |  | -30 °C to +60 °C   |
| Topology                                  |  | Transformerless  |
| Degree of Protection                      |  | IP66   |
| Allowable relative humidity range         |  | 0-100 %  |
| Max. operating altitude                   |  | 4000 m ( >3000 m derating )  |
| Weight                                    |  | <75 kg   |
| Cooling                                   |  | Smart forced air cooling   |
| Dimension                                 |  | 970 mm x 695 mm x 325 mm   |
| Display                                   |  | LCD  |
| Warranty                                  |  | standard warranty 10 years as per warranty policy  |

| DATASHEET                                 |  | ENVIRO GTI<br>255 kW- HV  |
|---|--|---|
| <b>Input (DC)</b>                         |  |   |
| Max. input voltage                        |  | 1500 V  |
| Rated input voltage                       |  | 1080 V  |
| Start-up voltage                          |  | 550 V   |
| MPPT operating voltage range              |  | 500 V~1500 V  |
| Full power MPPT voltage range             |  | 800 V~1300 V  |
| Number of MPP trackers                    |  | 12  |
| Number for DC inputs                      |  | 24  |
| Max. input current per MPPT               |  | 30A*12  |
| Max. input short circuit current per MPPT |  | 50A*12  |
| <b>Output (AC)</b>                        |  |   |
| Rated output power                        |  | 255 kW  |
| Maximum apparent power                    |  | 255 kVA @30°C / 235 kVA@40 °C / 220 kVA @50 °C  |
| Max. Output current                       |  | 184 A   |
| Nominal grid voltage                      |  | 3 / PE, 800 Vac   |
| Grid voltage range                        |  | 640 Vac~920 Vac   |
| Nominal frequency                         |  | 50 Hz / 60 Hz   |
| Grid frequency range                      |  | 45~55Hz / 55~ 65Hz ( according to local standard )                                      |
| Active power adjustable range             |  | 0~100 %   |
| THDi                                      |  | <3 %  |
| Power factor                              |  | 1 default (-0.8...+0.8 adjustable)  |
| Power factor                              |  | 1 default (-0.8...+0.8 adjustable)  |
| <b>Performance</b>                        |  |   |
| Max efficiency                            |  | 99.02 %   |
| European Weighted efficiency              |  | 98.5 %  |
| MPPT efficiency                           |  | >99.9 %   |
| Self-Consumption at night                 |  | < 2 W   |
| <b>Standard</b>                           |  |   |
| EMC                                       |  | EN 61000-6-2, EN 61000-6-4 (under certification)  |
| Safety standard                           |  | IEC62109-1/2, IEC62116, IEC61727, IEC-61683, IEC60068 (1,2,14,30) (under certification) |
| <b>Protection</b>                         |  |   |
| DC reverse polarity protection            |  | Yes   |
| Anti-Islanding Protection                 |  | Yes   |
| Leakage current protection                |  | Yes   |
| Ground fault monitoring                   |  | Yes   |
| PV-array string fault monitoring          |  | Yes   |
| Zero voltage ride through                 |  | Yes   |
| DC Switch                                 |  | Yes   |
| Anti-PID function                         |  | Optional  |
| AFCI protection                           |  | Optional  |
| Protection class/ overvoltage category    |  | I/III   |
| Input/ output SPD                         |  | PV: Type II standard, AC: Type II Standard  |
| <b>Protection</b>                         |  |   |
| Topology                                  |  | Transformer less  |
| Ambient temperature range                 |  | -30 °C~+60 °C   |
| Relative humidity                         |  | 0%-100 %  |
| Cooling                                   |  | Smart forced air cooling  |
| Max. altitude                             |  | 4000 m  |
| Noise                                     |  | ≤60 dB  |
| Mounting                                  |  | Wall mount  |
| Communication                             |  | WiFi / GPRS / RS485 / PLC / Bluetooth optional  |
| Operation data storage                    |  | 25 years  |
| Display                                   |  | LCD& Bluetooth  |
| Self-consumption at night                 |  | <2 W  |
| Degree of protection                      |  | IP66  |
| Dimension                                 |  | 1100.5 mm × 713.5 mm × 368 mm   |
| Weight                                    |  | 100 kg  |

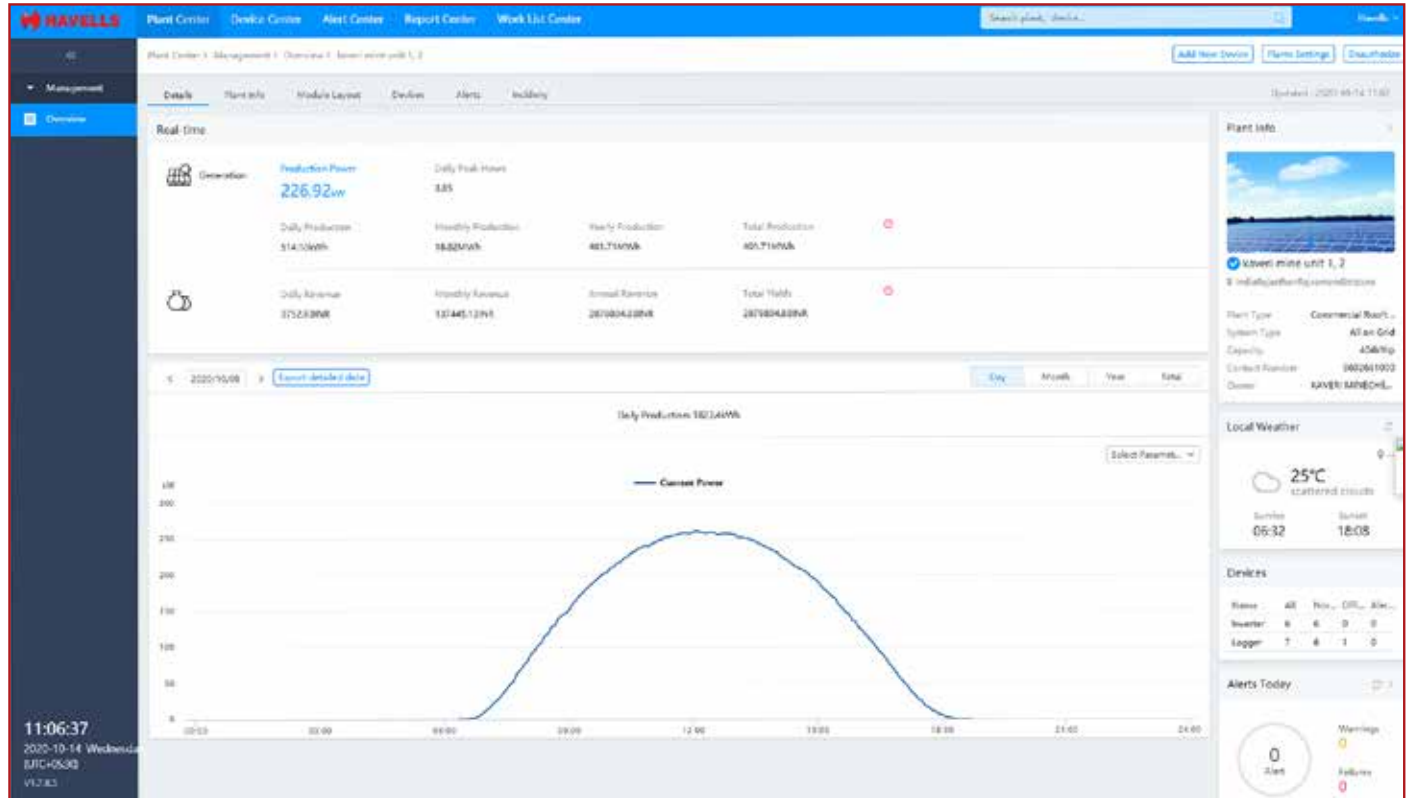
| DATASHEET                                 |  | ENVIRO GTI<br>350 kW- HV  |
|---|--|---|
| <b>Input (DC)</b>                         |  |   |
| Max. Input voltage                        |  | 1500 V  |
| Rated input voltage                       |  | 1160 V  |
| Start-up voltage                          |  | 550 V   |
| MPPT operating voltage range              |  | 500 V -1500 V   |
| Number of MPP trackers                    |  | 8   |
| Number for DC inputs                      |  | 32  |
| Max. input current per MPPT               |  | 8*60 A  |
| Max. input short circuit current per MPPT |  | 8*100 A   |
| <b>Output (AC)</b>                        |  |   |
| Rated output Power                        |  | 352 kW  |
| Max. apparent Power                       |  | 352 kVA   |
| Max. Output Current                       |  | 254.1 A   |
| Rated output Voltage                      |  | 3/PE, 800 V   |
| Output Voltage Range                      |  | 640 - 920 Vac   |
| Nominal Frequency                         |  | 50 Hz / 60 Hz   |
| Output Frequency Range                    |  | 45 Hz-55 Hz / 55 Hz - 65 Hz ( According to local standard )                             |
| Active power adjustable range             |  | 0~100 %   |
| THDi                                      |  | <3 % ( @100 %P )  |
| Power factor                              |  | 1default ( adjustable+ / -0.8 )   |
| <b>Performance</b>                        |  |   |
| Max. efficiency                           |  | 99.05 %   |
| European weighted efficiency              |  | 98.80 %   |
| <b>Protection</b>                         |  |   |
| DC reverse polarity protection            |  | Yes   |
| Anti-islanding protection Yes             |  | Yes   |
| Leakage current protection                |  | Yes   |
| Ground fault monitoring Yes               |  | Yes   |
| PV-array string fault monitoring          |  | Yes   |
| DC switch                                 |  | Yes   |
| Input/ Output SPD PV:                     |  | type II standard, AC: type II standard  |
| Certifications* (applied)                 |  | "IEC 61727, IEC 61683, IEC 62116, IEC 60068, IEC 61000, IEC 62109, IP 65, CEA, EN50530" |
| <b>Communication</b>                      |  |   |
| Power management unit                     |  | According to certification and request  |
| Communication                             |  | RS485 / PBUS  |
| <b>General Data</b>                       |  |   |
| Topology                                  |  | Transformer less  |
| Ambient temperature range                 |  | -30 °C~+60 °C   |
| Relative humidity                         |  | 0%-100 %  |
| Cooling                                   |  | Smart forced air cooling  |
| Max. altitude                             |  | 4000 m  |
| Noise                                     |  | ≤60 dB  |
| Mounting                                  |  | Wall mount  |
| Communication                             |  | WiFi / GPRS / RS485 / PLC / Bluetooth optional  |
| Operation data storage                    |  | 25 years  |
| Display                                   |  | LCD & Bluetooth   |
| Self-consumption at night                 |  | <2 W  |
| Degree of protection                      |  | IP66  |
| Dimension                                 |  | 1100.5 mm × 713.5 mm × 368 mm   |
| Weight                                    |  | 100 kg  |

\*Certifications is in process



## FEATURES

- Web based Remote monitoring
- User-friendly & easy access via Internet
- Real Time Data-logging and historical data storage for analysis
- Data available with various graph and format options for easy understanding and analysis
- Automatic alarms for any malfunctions via Email



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