

PRODUCT BROCHURE 2023

FOR APAC & Africa



hoymiles.com

Open Energy For All

Bringing smart solar to the entire world with rugged technology

Hoymiles' mission is to become the leading choice for getting started with smart energy, making good technology more impactful by ensuring it's accessible to everyone, and bringing smart solar to the entire world with high-quality products.

Hoymiles is a global MLPE (Module Level Power Electronics) solution provider, specializing in module-level inverters and storage systems. With a vision of a clean, sustainable future, we strive to lead the smart energy industry through our rugged technology and reliable products.

With our driven engineer team, 1200+ global experts and distribution & service network spanning North America, South America, Europe, Asia, Africa and Oceania, Hoymiles has empowered homeowners and professionals in more than 100countries and regions to join the journey to true open energy.

Hoymiles officially debuted on the Shanghai Stock Exchange STAR Market in Dec. 2021 under the stock code 688032. Now we are favored by the market as a trustworthy partner to our investors, installers and end consumers.

Product Portfolio

Single-phase | HMS Series Microinverter

- HMS-400 / HMS-450 / HMS-500-1T
- HMS-800 / HMS-900 / HMS-1000-2T
- HMS-1600 / HMS-1800 / HMS-2000-4T
- HMS-1600D / HMS-1800D / HMS-2000D-4T

Three-phase | HMT Series Microinverter

HMT-1600 / HMT-1800 / HMT-2000-4T HMT-1800 / HMT-2250-6T

Data Transfer Unit

- DTU-Pro-S
- DTU-Lite-S

Hybrid Inverter

HYS-3.0LV / HYS-3.6LV / HYS-4.6LV / HYS-5.0LV / HYS-6.0LV-EUG1 HYT-5.0HV / HYT-6.0HV / HYT-8.0HV / HYT-10.0HV / HYT-12.0HV-EUG1

AC-coupled Inverter

HAS-3.0LV / HAS-3.6LV / HAS-4.6LV / HAS-5.0LV-EUG1 HAT-5.0HV / HAT-6.0HV / HAT-8.0HV / HAT-10.0HV-EUG1

Data Transfer Stick

DTS-G1

Rapid Shutdown

- HRSD-1C
- HRSD-2C

Transmitter

HT10-Kit



Our Products

When you choose Hoymiles, you're choosing a neat set of advantages. Our products have a low failure rate, high-efficiency in converting DC to AC, are of the highest industry quality, and are incredibly easy to install.

Increased Return on Investment

- Easily install units in challenging conditions and positions
- Low start-up voltage

Smarter

 Module-level monitoring for remote troubleshooting & maintenance

More Efficient

- World's leading power density
- Leading MPPT efficiency: 99.8%



Installer Friendly

- Full product range: 1-1 to 1-6, 400W-2250W
- High cost effective (LCOE)
- Plug-and-play, easy installation
- Extensive warranty

Safer

- Up to 60V DC input voltage to eliminate the risk of a rooftop fire
- IP67

More Reliable

- Low failure rate (0.18%)
- Global compliant: EN50549-1:2019 and California
 Rule 21



Single-phase Microinverter 1 in 1

HMS-400-1T HMS-450-1T HMS-500-1T

With the output power up to 500 VA, Hoymiles new microinverter HMS-500 series rank among the highest for 1-in-1 microinverters.

Each microinverter connects to 1 PV module with independent MPPT and monitoring, ensuring greater energy harvest and easier maintenance.

The new Sub-1G wireless solution enables more stable communication under various environmental conditions.

High-powered microinverter for 1-in-1 with output power up to 500 VA

With Reactive Power Control, compliant with EN 50549-1:2019, VDE-AR-N 4105:2018, UL 1741, etc.



Connected to one panel, flexible for various applications



Safer for rooftop solar stations with rapid shutdown compliance and isolated transformer

Sub-1G wireless solution allows stable communication with Hoymiles gateway DTU

Technical Specifications

| Model | HMS-400-1T | | | HMS-450-1T | | | HMS-500-1T | | |
|---|--------------------------------------|---|-----------------------|-----------------------------|--------------------------|----------------------------|--------------------------|-----------------|-----------------|
| Input Data (DC) | | | | | | | | | |
| Commonly used module power (W) |) 320 to 540+ | | | 360 to 600+ | | | 400 to 670+ | | |
| Maximum input voltage (V) | | | | | 65 | | | | |
| MPPT voltage range (V) | | | | | 16–60 | | | | |
| Start-up voltage (V) | | | | 22 | | | | | |
| Maximum input current (A) | | 14 | | | 15 | | 16 | | |
| Maximum input short circuit current (A) | | | | | 25 | | | | |
| Number of MPPTs | | | | | 1 | | | | |
| Number of Inputs per MPPT | | | | | 1 | | | | |
| Output Data (AC) | | | | | | | | | |
| Rated output power (VA) | | 400 | | | 450 | | | 500 | |
| Rated output current (A) | 1.82 | 1.74 | 1.67 | 2.05 | 1.96 | 1.88 | 2.27 | 2.17 | 2.08 |
| Nominal output voltage/range (V) ¹ | 220/180- 275 | 230/180- 275 | 240/180- 275 | 220/180- 275 | 230/180- 275 | 240/180- 275 | 220/180- 275 | 230/180- 275 | 240/180- 275 |
| NNominal frequency/range (Hz) ¹ | | | | 50/45 | 5–55 or 60/ | 55–65 | | | |
| Power factor (adjustable) | | > 0.99 default 0.8 leading 0.8 lagging | | | | | | | |
| Total harmonic distortion | | | | < 3% | | | | | |
| Maximum units per 10AWG branch ² | 17 | 18 | 19 | 15 | 16 | 17 | 14 | 14 | 15 |
| Maximum units per 12AWG branch ² | 11 | 11 | 12 | 9 | 10 | 10 | 8 | 9 | 9 |
| Efficiency | | | | | | | | | |
| CEC peak efficiency | | | | | 96.5% | | | | |
| Nominal MPPT efficiency | | | | | 99.8% | | | | |
| Night power consumption (mW) | | | | | < 50 | | | | |
| Mechanical Data | | | | | | | | | |
| Ambient temperature range (°C) | | | | | -40 to +65 | | | | |
| Dimensions (W \times H \times D mm) | | | | 18 | 82 × 164 × | 30 | | | |
| Weight (kg) | | | | | 1.75 | | | | |
| Enclosure rating | Outdoor-IP67 (NEMA 6) | | | | | | | | |
| Cooling | Natural convection-No fans | | | | | | | | |
| Features | | | | | | | | | |
| Communication | Sub-1G | | | | | | | | |
| Type of isolation | Galvanically Isolated HF Transformer | | | | | | | | |
| Monitoring | | | | Hoymi | les S-Miles | Cloud ³ | | | |
| Compliance | | IEC/EN | EN 5054 N 62109-1/ | 9-1: 2019, \ -2,IEC/EN 6 | /DE-AR-N 4 1000-6-1/- | 105: 2018, 2/-3/-4, IEC | , UL 1741, C/EN 61000 | -3-2/-3 | |

*1 Nominal voltage/frequency range can vary depending on local requirements. *2 Refer to local requirements for exact number of microinverters per branch.



Single-phase **Microinverter 2 in 1**

HMS-800-2T HMS-900-2T HMS-1000-2T

gateway DTU.

High-powered microinverter for 2-in-1 with output power up to 1000 VA

Safer for rooftop solar stations with rapid shutdown $\mathbf{\overline{\mathbf{V}}}$ compliance and isolated transformer



greater energy harvest and easier maintenance



2-in-1 design enables faster installation

Independent MPPT and monitoring ensure

Sub-1G wireless solution allows stable communication in commercial and industrial settings

Technical Specifications

| Model | HMS-800-2T | | HMS-900-2T | | | HMS-1000-2T | | | |
|---|--------------------------------------|--|----------------------------|----------------------------|---------------------------|-----------------------------|------------------------|----------------------|-----------------|
| Input Data (DC) | | | | | | | | | |
| Commonly used module power (W) |) 320 to 540+ | | | 360 to 600+ | | | 400 to 670+ | | |
| Maximum input voltage (V) | | | | | 65 | | | | |
| MPPT voltage range (V) | | | | | 16–60 | | | | |
| Start-up voltage (V) | | | | | 22 | | | | |
| Maximum input current (A) | | 2×14 | | | 2×15 | | 2 × 16 | | |
| Maximum input short circuit current (A) | | | | | 2 × 25 | | | | |
| Number of MPPTs | | | | | 2 | | | | |
| Number of Inputs per MPPT | | | | | 1 | | | | |
| Output Data (AC) | | | | | | | | | |
| Rated output power (VA) | | 800 | | | 900 | | | 1000 | |
| Rated output current (A) | 3.64 | 3.48 | 3.33 | 4.09 | 3.91 | 3.75 | 4.55 | 4.35 | 4.17 |
| Nominal output voltage/range $(V)^1$ | 220/180– 275 | 230/180- 275 | 240/180- 275 | 220/180- 275 | 230/180- 275 | 240/180- 275 | 220/180- 275 | 230/180- 275 | 240/180- 275 |
| Nominal frequency/range (Hz) ¹ | | | | 50/45 | 5-55 or 60/ | ′55–65 | | | |
| Power factor (adjustable) | | > 0.99 default 0.8 leading0.8 lagging | | | | | | | |
| Total harmonic distortion | | | | | < 3% | | | | |
| Maximum units per 10AWG branch ² | 8 | 9 | 9 | 7 | 8 | 8 | 7 | 7 | 7 |
| Maximum units per 12AWG branch ² | 5 | 5 | 6 | 4 | 5 | 5 | 4 | 4 | 4 |
| Efficiency | | | | | | | | | |
| CEC peak efficiency | | 96.7% | | | 96.5% | | 96.5% | | |
| Nominal MPPT efficiency | | | | | 99.8% | | | | |
| Night power consumption (mW) | | | | | < 50 | | | | |
| Mechanical Data | | | | | | | | | |
| Ambient temperature range (°C) | | | | | -40 to +65 | 5 | | | |
| Dimensions (W \times H \times D mm) | | 261 × 180 × 35.1 | | | | | | | |
| Weight (kg) | | | | | 3.2 | | | | |
| Enclosure rating | Outdoor-IP67 (NEMA 6) | | | | | | | | |
| Cooling | Natural convection-No fans | | | | | | | | |
| Features | | | | | | | | | |
| Communication | | | | | Sub-1G | | | | |
| Type of isolation | Galvanically Isolated HF Transformer | | | | | | | | |
| Monitoring | | Hoymiles S-Miles Cloud ³ | | | | | | | |
| Compliance | | EN 505 IEC/EN | 549-1: 2019 N 62109-1/- | , VDE-AR-N -2, IEC/EN 6 | l 4105: 201 51000-6-1/ | 8, UL 1741 -2/-3/-4, IE(| , ABNT NB C/EN 6100 | R 16150, D-3-2/-3 | |

*1 Nominal voltage/frequency range can vary depending on local requirements. *2 Refer to local requirements for exact number of microinverters per branch.

High-powered microinverter with output power up to 2000 VA

Independent MPPT and monitoring ensure \checkmark greater energy harvest and easier maintenance

With Reactive Power Control, compliant with EN 50549-1:2019, VDE-AR-N 4105:2018, UL 1741, ABNT NBR 16150, etc.

Single-phase Microinverter 4 in 1

HMS-1600-4T HMS-1800-4T HMS-2000-4T

4-in-1 design enables faster installation \checkmark and comes with a lower cost



Safer for rooftop solar stations with rapid shutdown compliance and isolated transformer

Sub-1G wireless solution allows stable communication in commercial and industrial settings

Technical Specifications

| Model | HMS-1600-4T | | HMS-1800-4T | | | HMS-2000-4T | | | | |
|---|--|-----------------|-----------------|-----------------|-------------------------|-----------------|-----------------|-----------------|-----------------|--|
| Input Data (DC) | | | | | | | | | | |
| Commonly used module power (W) | 320 to 540+ | | | 360 to 600+ | | | 400 to 670+ | | | |
| Maximum input voltage (V) | | | | | 65 | | | | | |
| MPPT voltage range (V) | | | | | 16-60 | | | | | |
| Start-up voltage (V) | | | | 22 | | | | | | |
| Maximum input current (A) | | 4×14 | | | 4 × 15 | | | 4 × 16 | | |
| Maximum input short circuit current (A) | | | | | 4 × 25 | | | | | |
| Number of MPPTs | | | | | 4 | | | | | |
| Number of inputs per MPPT | | | | | 1 | | | | | |
| Output Data (AC) | | | | | | | | | | |
| Rated output power (VA) | | 1600 | | | 1800 | | | 2000 | | |
| Rated output current (A) | 7.27 | 6.96 | 6.67 | 8.18 | 7.83 | 7.5 | 9.09 | 8.7 | 8.33 | |
| Nominal output voltage/range (V) ¹ | 220/180- 275 | 230/180- 275 | 240/180- 275 | 220/180- 275 | 230/180- 275 | 240/180- 275 | 220/180- 275 | 230/180- 275 | 240/180- 275 | |
| Nominal frequency/range (Hz) ¹ | | | | 50/45 | –55 or 60/ | 55-65 | | | | |
| Power factor (adjustable) | | | | < 0.8 lea | 0.99 defau ding0.8 l | ult agging | | | | |
| Total harmonic distortion | | | | | < 3% | | | | | |
| Maximum units per 10AWG branch ² | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | |
| Efficiency | | | | | | | | | | |
| CEC peak efficiency | | | | | 96.5% | | | | | |
| Nominal MPPT efficiency | | | | | 99.8% | | | | | |
| Night power consumption (mW) | < 50 | | | | | | | | | |
| Mechanical Data | | | | | | | | | | |
| Ambient temperature range (°C) | | | | | -40 to +65 | | | | | |
| Dimensions (W \times H \times D mm) | 331 × 218 × 40.6 | | | | | | | | | |
| Weight (kg) | 5.6 | | | | | | | | | |
| Enclosure rating | Outdoor-IP67 (NEMA 6) | | | | | | | | | |
| Cooling | Natural convection-No fans | | | | | | | | | |
| Features | | | | | | | | | | |
| Communication | Sub-1G | | | | | | | | | |
| Type of isolation | Galvanically Isolated HF Transformer | | | | | | | | | |
| Monitoring | | | | S- | Miles Clou | d ³ | | | | |
| Compliance | EN 50549-1: 2019, VDE-AR-N 4105: 2018, UL 1741, ABNT NBR 16150, IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4, IEC/EN 61000-3-2/-3 | | | | | | | | | |

*1 Nominal voltage/frequency range can vary depending on local requirements. *2 Refer to local requirements for exact number of microinverters per branch.



Single-phase Microinverter 4 in 1

HMS-1600D-4T HMS-1800D-4T HMS-2000D-4T

Hoymiles 4-in-1 microinverter HMS-2000D-4T features 4 input channels, significantly lowering installation costs.

All of these models listed are connected to an intelligent monitoring system to track individual modules' performance over time and offer superior energy production.

The new Sub-1G wireless solution enables more stable communication under various environmental conditions.

High-powered microinverter with output power up to 2000 VA.

4-in-1 design maximizes efficiency and reduces costs.

99.8% MPPT efficiency and module-level monitoring ensure greater energy harvest and easier maintenance.

Comply with UL 1741, IEC 61727, IEC 62116, IEC 61683, ect.

Sub-1G wireless solution allows stable communication in commercial and industrial settings.

IP67 (NEMA 6) protection degree, adapt to outdoor use.

Technical Specifications

| Model | HMS-1600D-4T | | | HMS-1800D-4T | | | HMS-2000D-4T | | |
|---|--------------------------------------|-----------------|------------------------|---|------------------------|---------------------------|--------------------------|---------------------|-----------------|
| Input Data (DC) | | | | | | | | | |
| Commonly used module power (W) | 320 to 540+ | | | 360 to 600+ | | | 400 to 670+ | | |
| Maximum input voltage (V) | | | | | 65 | | | | |
| MPPT voltage range (V) | | | | | 16-60 | | | | |
| Start-up voltage (V) | | | | | 22 | | | | |
| Maximum input current (A) | | 4×14 | | | 4×15 | | | 4×16 | |
| Maximum input short circuit current (A) | | | | | 4 × 25 | | | | |
| Number of MPPTs | | | | | 2 | | | | |
| Number of inputs per MPPT | | | | | 2 | | | | |
| Output Data (AC) | | | | | | | | | |
| Rated output power (VA) | | 1600 | | | 1800 | | | 2000 | |
| Rated output current (A) | 7.27 | 6.96 | 6.67 | 8.18 | 7.83 | 7.50 | 9.09 | 8.70 | 8.33 |
| Nominal output voltage/range (V) ¹ | 220/180- 275 | 230/180- 275 | 240/180- 275 | 220/180- 275 | 230/180- 275 | 240/180- 275 | 220/180- 275 | 230/180- 275 | 240/180- 275 |
| Nominal frequency/range (Hz) ¹ | | | | 50/45-55 or 60/55-65 | | | | | |
| Power factor (adjustable) | | | | > 0.99 default 0.8 leading 0.8 lagging | | | | | |
| Total harmonic distortion | | | | | < 3% | | | | |
| Maximum units per branch ² | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 |
| Efficiency | | | | | | | | | |
| CEC peak efficiency | | 96.70% | | 96.50% | | | 96.50% | | |
| Nominal MPPT efficiency | | | | 99.80% | | | | | |
| Night power consumption (mW) | | | | < 50 | | | | | |
| Mechanical Data | | | | | | | | | |
| Ambient temperature range (°C) | | | | | -40 to +65 | 5 | | | |
| Dimensions (W × H × D [mm]) | | | | 31 | 0 × 185 × 4 | 40.6 | | | |
| Weight (kg) | 4.5 | | | | | | | | |
| Enclosure rating | Outdoor-IP67 (NEMA 6) | | | | | | | | |
| Cooling | Natural convection – No fans | | | | | | | | |
| Features | | | | | | | | | |
| Communication | Sub-1G | | | | | | | | |
| Тороlоду | Galvanically Isolated HF Transformer | | | | | | | | |
| Monitoring | S-Miles Cloud ³ | | | | | | | | |
| Compliance | | IEC IEC/EN | 61727, IE 62109-1/- | C 62116, I 2, IEC/EN | EC 61683, 61000-6-1 | IEC60068 /-2/-3/-4, II | -2-1/-2/-14 EC/EN 610 | 4/-30, 00-3-2/-3 | |

*1 Nominal voltage/frequency range can vary depending on local requirements. *2 Refer to local requirements for exact number of microinverters per branch.

Cable Accessories for Microinverter of HMS Series



Used to disconnect the connection between the microinverter and the AC Trunk Connector.

Used to unlock the AC Trunk Connector upper cover so that the cable can be removed, replaced, and the AC Trunk End Cap installed.

Connect the microinverter and the PV module when the distance between this two exceeds the original cable length.

| Model | AC Trunk Cable | | | | | |
|-----------------------------------|----------------|--------------|--|--|--|--|
| Main Parameters | | | | | | |
| Cable type | 10 AWG | 12 AWG | | | | |
| Rated voltage | 60 | 10 V | | | | |
| Cable outer diameter | 12.5±0.40 mm | 11.1±0.30 mm | | | | |
| Ambient temperature range | -40°C t | o +90°C | | | | |
| AC Trunk Connector spacing | 4.2 m/2 m | 1 m | | | | |
| Number of AC Trunk Connectors per | 10/20 | 40 | | | | |
| Single AC Trunk Cable | 10/20 | 40 | | | | |
| Single AC Trunk Cable length | 39.3 m/41 m | 46 m | | | | |
| Compliance | | | | | | |
| Product standard | UL 44, UL 12 | 277, UL 1581 | | | | |
| RoHS compliant | Y | es | | | | |

| Model | AC Trunk Connector | | | |
|---|--|--|--|--|
| Main Parameters | | | | |
| Pin number | 2P+PE | | | |
| Rated current | 32 A (Use 10 AWG/6mm ² copper cable) | | | |
| Rated voltage | 300 V | | | |
| Contact resistance | ≤5 mΩ | | | |
| Power frequency withstand voltage | 1500V AC | | | |
| Over voltage type | Ш | | | |
| Connection Parameter | | | | |
| Applicable cable specification | 12/10 AWG | | | |
| Applicable cable outer diameter | 10 mm to 13 mm | | | |
| Cable connection type | Screw pressing | | | |
| Sub connector connection type | Crimping | | | |
| Mechanical Data | | | | |
| Ambient temperature range | -40°C to +85°C | | | |
| Dimensions (L \times W \times H mm) | 150 × 40 × 110 | | | |
| Protection rating | IP68 | | | |
| Flame resistance degree | UL 94-V0 | | | |
| Compliance | | | | |
| Product standard | PPP 59015A:2013 ANSI/UL 6703-2017 | | | |
| RoHS compliant | Yes | | | |

| Model | DC Extens | ion Cable |
|---------------------------------|--------------------------------------|---|
| Cable | | |
| Cable type | PV1-F | 1X4 |
| Rated current | 20 | A |
| Rated voltage | Max.186 | DOV DC |
| Cable length | 1 1 | n |
| Ambient temperature range | -40°C to |) +90°C |
| Product standard | 2 PfG 1169 | 9/08.2007 |
| DC Connector | | |
| Manufacturer | Betteri | Staubli |
| Туре | BC03A, BC03B | PV-KBT4/6II-UR |
| Rated current | 30 A | 39 A (TUV), 30 A (UL) |
| Rated voltage | 1000 V DC (TUV), 600/1000 V DC (CSA) | 1000 V DC (TUV), 1500 V DC (UL) |
| Rated impulse withstand voltage | 6000 V | 12000 V |
| Over voltage category | II | I |
| Ambient temperature range | -40°C to +85°C | -40°C to +85°C (TUV), -40°C to +75°C (UL) |
| Protection rating | IP67 | IP68 |
| Flame resistance degree | UL 94 | 4-V0 |
| Product standard | EN 62852:2014 UL 6703 | EN 62852 UL 6703 2PfG2330 CNCA/CTS0002-2012 |
| RoHS compliant | Ye | S |

| | | Staubli |
|---------|----------|---|
| | | PV-KBT4/6II-UR |
| | | 39 A (TUV), 30 A (UL) |
| C (CSA) | | 1000 V DC (TUV), 1500 V DC (UL) |
| | | 12000 V |
| | III | |
| | | -40°C to +85°C (TUV), -40°C to +75°C (UL) |
| | | IP68 |
| | UL 94-V0 |) |
| | | EN 62852 UL 6703 2PfG2330 CNCA/CTS0002-2012 |
| | Yes | |
| | | |

Cable Accessories for Microinverter of HMS Series



HMS Field Connector

HMS Field Connector is designed for the situation where a PV system only has one microinverter. It provides a quick and simple electrical connection between the microinverter and the grid by serving as a joining component.



Plug and Play Cable

The Plug and Play Cable is designed for the situation where a PV system has only one microinverter. It consists of the HMS field connector, AC cable, and plug. The HMS field connector is connected to the microinverter, and the plug is connected to the household socket in accordance with local regulations. This simple plug-and-play design allows users to easily and quickly connect the single microinverter system to the grid.

| Model | |
|--------------------------------------|--|
| Main Parameters | |
| Pin number | |
| Rated current | |
| Rated voltage | |
| Contact resistance | |
| Power frequency withstand voltage | |
| Overvoltage type | |
| Connection Parameter | |
| Applicable cable specification | |
| Applicable cable outer diameter | |
| Cable connection type | |
| Mechanical Data | |
| Ambient temperature range | |
| Dimensions (L \times W \times H) | |
| Protection rating | |
| Flame resistance degree | |
| Compliance | |
| Product standard | |
| RoHS compliant | |

| Model |
|---------------------------|
| Cable |
| Cable type |
| Rated current |
| Rated voltage |
| Ambient temperature range |
| Cable length |
| Compliance |
| Product standard |
| RoHS compliant |

| Model | |
|---------------------------|--|
| Main Parameters | |
| Plug standard | |
| Rated current | |
| Rated voltage | |
| Ambient temperature range | |
| Compliance | |
| Product standard | |
| RoHS compliant | |

| HMS Field Connector | |
|--|--|
| | |
| 2P+PE | |
| 2 A (Use 16 AWG / 1.5 mm ² copper cable) | |
| 300 V | |
| ≤1 mΩ | |
| 3000 V AC | |
| III | |
| | |
| 16/18 AWG, 1.0/1.5 mm ² copper cable | |
| 8-9.5 mm | |
| Screw pressing | |
| | |
| -40°C to +85°C | |
| 135 × 38 × 25 mm | |
| IP68 | |
| UL 94-V0 | |
| | |
| PPP 59015A:2013, ANSI/UL 6703-2017 | |
| Yes | |
| | |
| AC Cable | |
| | |
| 1.5 mm ² | |
| 12 A | |
| 450 V | |
| -25°C to +60°C | |
| Customizable | |
| Customizable | |
| | |
| 10 V 2 FIG 1940 ULEC 00245-4 | |
| Yes | |
| | |
| AC Plug | |
| | |
| Schuko CEE7/7 | |
| 16 A | |
| 250 V | |
| -40°C to +85°C | |
| | |
| VDE 0620 | |
| Yes | |

Three-phase **Microinverter 4 in 1**

HMT-1600-4T HMT-1800-4T HMT-2000-4T

industrial applications

Three-phase output, more suitable for commercial and

With output power up to 2000 VA, compatible with 182 mm/210 mm PV module

 $\mathbf{\nabla}$ Grid protection relay integrated

4-in-1 design enables faster installation and comes with a lower cost

Safer for rooftop solar stations with rapid \checkmark shutdown compliance and isolated transformer

Sub-1G wireless solution allows stable communication in commercial and industrial settings

Technical Specifications

| Model | HMT-1600-4T | HMT-1800-4T | HMT-2000-4T | |
|--|--------------------------------------|---|-------------------------------|--|
| Input Data (DC) | | | | |
| Commonly used module power (W) | 320 to 540+ | 360 to 600+ | 400 to 670+ | |
| Maximum input voltage (V) | | 65 | | |
| MPPT voltage range (V) | | 16-60 | | |
| Min./Max. start voltage(V) | | 22/60 | | |
| Maximum input current (A) | 4×14 | 4 × 15 | 4 × 16 | |
| Maximum input short circuit current (A) | | 4 × 25 | | |
| Number of MPPTs | | 2 | | |
| Number of Inputs per MPPT | | 2 | | |
| Output Data (AC) | | | | |
| Grid Type | | Three Phase | | |
| Rated output power (VA) | 1600 | 1800 | 2000 | |
| Rated output current (A) | 2.32 × 3 | 2.61 × 3 | 2.9 × 3 | |
| Nominal output voltage (V) | | 230/400, 3W+N+PE | | |
| Nominal frequency (Hz) | | 50 | | |
| Power factor (adjustable) | | > 0.99 default | | |
| Total harmonic distortion | | < 3% | | |
| Maximum units per 12 AWG branch ¹ | 8 | 7 | 6 | |
| Maximum units per 10 AWG branch ¹ | 13 | 11 | 10 | |
| Efficiency | | | | |
| CEC peak efficiency | | 96.50% | | |
| Nominal MPPT efficiency | | 99.80% | | |
| Night power consumption (mW) | | < 50 | | |
| Mechanical Data | | | | |
| Ambient temperature range (°C) | | -40 to +65 | | |
| Storage temperature range (°C) | | -40 to +85 | | |
| Dimensions (W \times H \times D [mm]) | | 326 × 222 × 40.6 | | |
| Weight (kg) | | 5.9 | | |
| Enclosure rating | | Outdoor-IP67 | | |
| Cooling | Natural convection-No fans | | | |
| Features | | | | |
| Communication | | Sub-1G | | |
| Type of isolation | Galvanically Isolated HF Transformer | | | |
| Monitoring | | S-Miles Cloud ² | | |
| Compliance | VDE-AR-N IEC/EN 62109-1/-2 | 4105: 2018, EN 50549-1:2019, V 2, IEC/EN 61000-6-1/-2/-3/-4, IEC | /FR 2019, /EN 61000-3-2/-3 | |



Three-phase Microinverter 6 in 1

HMT-1800-6T HMT-2250-6T

gateway DTU.

External antenna for stronger communication with DTU \checkmark



With Reactive Power Control, compliant

Compliant with U.S. NEC-2017&NEC-2020 690.12 rapid shutdown

with CA Rule 21

Easy installation, just plug and play

Technical Specifications

| Model | HMT-1800-6T | HMT-2250-6T | | |
|---|--|--|--|--|
| Input Data (DC) | | | | |
| Commonly used module power (W) | 240 to 405+ | 300 to 505+ | | |
| Maximum input voltage (V) | | 60 | | |
| MPPT voltage range (V) | | 16–60 | | |
| Start-up voltage (V) | | 22 | | |
| Maximum input current (A) | | 6 × 11.5 | | |
| Maximum input short circuit current (A) | | 6 × 15 | | |
| Number of MPPTs | | 3 | | |
| Number of inputs per MPPT | | 2 | | |
| Output Data(AC) | | | | |
| Grid connection | Tł | nree phase | | |
| Rated output power (VA) | 1800 | 2250 | | |
| Rated output current (A) | 2.61 × 3 | 3.26 × 3 | | |
| Nominal output voltage/range (V) ¹ | 230/4 | 100, 3W+N+PE | | |
| Nominal frequency/range (Hz) ¹ | Ę | 50/45-55 | | |
| Power factor (adjustable) | > 0.99 default 0.8 leading0.8 lagging | | | |
| Total harmonic distortion | | < 3% | | |
| Maximum units per 10AWG branch ² | 11 | 9 | | |
| Maximum units per 12AWG branch ² | 7 | 6 | | |
| Efficiency | | | | |
| CEC peak efficiency | | 96.5% | | |
| Nominal MPPT efficiency | | 99.8% | | |
| Night power consumption (mW) | | < 50 | | |
| Mechanical Data | | | | |
| Ambient temperature range (°C) | -2 | 40 to +65 | | |
| Dimensions (W × H × D mm) | 330 × 250 × 35 | 330 × 250 × 37 | | |
| Weight (kg) | 5.5 | 6.0 | | |
| Enclosure rating | | IP67 | | |
| Cooling | Natural co | prvection-No fans | | |
| Features | | | | |
| Communication | | Sub-1G | | |
| Type of isolation | Galvanically Iso | plated HF Transformer | | |
| Monitoring | S-M | files Cloud ³ | | |
| Compliance | VDE-AR-N 4105: 2018 | , EN 50549-1:2019, VFR 2019, 000-6-1/-2/-3/-4, JEC/EN 61000 3, 2/ 3 | | |

Cable Accessories for Microinverter of HMT Series



| Model | 3P-AC Trunk Cable |
|---|-------------------------|
| Main Parameters | |
| Cable type | 10 AWG |
| Rated voltage | 600 V |
| Cable outer diameter | 15.8±0.50 mm |
| Ambient temperature range | -40°C to +90°C |
| AC Trunk Connector spacing | 3.05 m |
| Number of AC Trunk Connectors per single AC Trunk Cable | 14 |
| Single AC Trunk Cable length | 45.5 m |
| Compliance | |
| Product standard | UL 44, UL 1277, UL 1581 |
| RoHS compliant | Yes |

| Model | 3P-AC Trunk Connector | | | | |
|-----------------------------------|--|--|--|--|--|
| Main Parameters | | | | | |
| Pin number | 3P+N+PE | | | | |
| Rated current | 32 A (Use 10 AWG/6mm ² copper cable) | | | | |
| Rated voltage | 500 V | | | | |
| Contact resistance | ≤5 mΩ | | | | |
| Power frequency withstand voltage | 3000 V AC | | | | |
| Over voltage type | III | | | | |
| Connection Parameter | | | | | |
| Applicable cable specification | 12/10 AWG | | | | |
| Applicable cable outer diameter | 13 mm to 18 mm | | | | |
| Cable connection type | Screw pressing | | | | |
| Sub connector connection type | Crimping | | | | |
| Mechanical Data | | | | | |
| Ambient temperature range | -40°C to +85°C | | | | |
| Dimensions (L × W × H mm) | 200 × 45 × 120 | | | | |
| Protection rating | IP68 | | | | |
| Flame resistance degree | UL 94-V0 | | | | |
| Compliance | | | | | |
| Product standard | 2PfG1915 ANSI/UL 6703-2017 | | | | |
| RoHS compliant | Yes | | | | |

| Model | DC Extension Cable | | | | |
|---------------------------------|--|---|--|--|--|
| Cable | | | | | |
| Cable type | PV1-F 1X4 | | | | |
| Rated current | | 20 A | | | |
| Rated voltage | Max. | 1800V DC | | | |
| Cable length | | 1 m | | | |
| Ambient temperature range | -40°C | to +90°C | | | |
| Product standard | 2 PfG 11 | 69/08.2007 | | | |
| DC Connector | | | | | |
| Manufacturer | Betteri | Staubli | | | |
| Туре | BC03A, BC03B | PV-KBT4/6II-UR | | | |
| Rated current | 30 A | 39 A (TUV), 30 A (UL) | | | |
| Rated voltage | 1000 V DC (TUV), 600/1000 V DC (CSA) | 1000 V DC (TUV), 1500 V DC (UL) | | | |
| Rated impulse withstand voltage | 6000 V | 12000 V | | | |
| Over voltage category | | III | | | |
| Ambient temperature range | -40°C to +85°C | -40°C to +85°C (TUV), -40°C to +75°C (UL) | | | |
| Protection rating | IP67 IP68 | | | | |
| Flame resistance degree | UL | .94-V0 | | | |
| Product standard | EN 62852:2014 UL 6703 EN 62852 UL 6703 2PfG2330 CNCA/CTS0002-2 | | | | |
| RoHS compliant | | Yes | | | |

Technical Specifications DTU-Pro-S (Wi-F Model **Communication to Microinverter** Signal Maximum distance (open space) Monitoring data limit from solar panels¹ **Communication to S-Miles Cloud** Ethernet Wireless² Wi-Fi: 802.1 Sample rate **Communication to Peripherals** RS485 Ethernet DRM (For AU/NZ only) Interaction LED APP Power Supply (Adapter) Туре Adapter input voltage/frequency Adapter output voltage/current Power consumption Typ. 1.5 W / Ma **Mechanical Data**

Ambient temperature (°C) Dimensions ($W \times H \times D$ mm) Weight (kg) Installation method

Environmental rating

Compliance Certificates

Microinverter Compatibility

Microinverter model

*1 This depends on the installation environment. Please refer to user

*2 Extended antenna is recommended if the DTU is installed inside a

Data Transfer Unit

DTU-Pro-S Compatible with HMS/HMT series

nth

and data of PV microinverter using Sub-1G

remote operation and maintenance of

$\mathbf{\nabla}$ Simple and Efficient O&M

- Module-level monitoring and data storage
- · Local configuration with S-Miles Toolkit
- · Support remote O&M including remote upgrading, parameter setting

- Smart zero export control and power export limiting
- PV generation and load consumption monitoring

Reliable and Flexible

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1111

- Sub-1G wireless solution enables stable communication with HMS, HMT series of microinverter
- More communication options with Ethernet, Wi-Fi or 4G
- Support of RS485, Ethernet to communicate with peripherals

 \checkmark Smart



| i Version) | DTU-Pro-S (4G Version) | | | |
|---|--|--|--|--|
| | | | | |
| Sub-1G | | | | |
| | 400 m | | | |
| | 99 | | | |
| | | | | |
| RJ45 × | 1, 100Mbps | | | |
| lb/a/n | 4G: TDD-LTE, FDD-LTE | | | |
| rb/g/ll | 2G: GSM/GPRS | | | |
| Perí | 15 minutes | | | |
| | | | | |
| COM × 1, 960 | Obps, Modbus-RTU | | | |
| RJ45 × 1 | , Modbus-TCP | | | |
| RJ45 × 1, | DRM0/5/6/7/8 | | | |
| | | | | |
| LED Indicator × 4 | – RUN, Cloud, MI, ALM | | | |
| S-M | iles Toolkit | | | |
| | | | | |
| Exter | nal adapter | | | |
| 100 to 240 | V AC/50 or 60 Hz | | | |
| 1 | 5 V/2 A | | | |
| ax. 3.0 W | Typ. 2.5 W / Max. 5.0 W | | | |
| | | | | |
| -2 | 0 to +55 | | | |
| 200 × 101 × 29 | 9 (without antennas) | | | |
| | 0.20 | | | |
| Wall mounting | / Desktop mounting | | | |
| Inc | loor-IP20 | | | |
| | | | | |
| CE, FCC, | IC, RCM, Anatel | | | |
| | | | | |
| HMS ser | es, HMT series | | | |
| r manual for more a metal box or une | e details. der a metal/concrete roof. | | | |
| | | | | |
| | | | | |





Data Transfer Unit DTU-Lite-S

Hoymiles gateway DTU-Lite-S is a data transfer unit which collects information and data of PV microinverter via Sub-1G wireless

solution and sends them to S-Miles Cloud, Hoymiles Monitoring Platform, using Wi-Fi communication.

With small size and easy installation, DTU-Lite-S is suitable for residential PV systems. Users can easily read module-level data and alarms, realize remote operation and maintenance of the microinverter system at any time and any place on S-Miles Cloud.

Plug and play, easy installation

Module-level monitoring and data storage

Real-time microinverter data and alarm on S-Miles Toolkit

Remote system management on S-Miles Cloud

Technical Specifications

| Model | |
|--|--|
| Communication to Microinverter | |
| Туре | |
| Maximum distance (open space) | |
| Monitoring data limit from solar panels ¹ | |
| Communication to S-Miles Cloud | |
| Signal | |
| Sample rate | |
| Interaction | |
| LED | |
| Local App | |
| Power Supply (Adapter) | |
| Туре | |
| Adapter input voltage/frequency | |
| Adapter output voltage/current | |
| Power consumption (DTU) | |
| Mechanical Data | |
| Ambient temperature range (°C) | |
| Dimensions (W \times H \times D mm) | |
| Weight (kg) | |
| Installation option | |
| Compliance | |
| Certificate | |
| Microinverter Compatibility | |
| Microinverter model | |

*1 This depends on the installation environment. Please refer to user manual for more details.

Sub-1G wireless solution with microinverter

Re

| DTU-Lite-S | |
|-----------------|--|
| | |
| Sub-1G | |
| 400 m | |
| 99 | |
| | |
| 802.11b/g/n | |
| Per 15 minutes | |
| | |
| LED Indicator | |
| S-Miles Toolkit | |

External adapter

100 to 240 V AC / 50 or 60Hz

5V / 2A

Typ. 1.0W / Max. 5.0W

-20 to +55

143 × 33 × 12.5

0.1

Direct plug-in

CE, FCC, IC, RCM, Anatel

HMS series, HMT series

Technical Specifications

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12

| Model | HYS-3.0LV-EUG1 | HYS-3.6LV-EUG1 | HYS-4.6LV-EUG1 | HYS-5.0LV-EUG1 | HYS-6.0LV-EUG1 |
|--|--------------------|----------------|-------------------------|-------------------------|------------------------|
| Battery | | | | | |
| Battery Type | Li-ion / Lead-acid | | | | |
| Nominal Battery Voltage (V) | | | 48 | | |
| Voltage Range (V) | | | 40-60 | | |
| Max. Charge Current (A) | 75 | 90 | 100 | 100 | 100 |
| Max. Discharge Current (A) | 75 | 90 | 100 | 100 | 100 |
| Charging Strategy for Li-ion Battery | | | Self-adaption to BMS | | |
| Charging Curve | | | 3 Stages / Equalization | | |
| External Temperature Sensor | | | Optional | | |
| PV Input | | | | | |
| Max. PV Input Power (W) | 4500 | 6000 | 7500 | 7500 | 7500 |
| Max. PV Input Voltage (V) | | | 550 | | |
| Nominal Input Voltage (V) | | | 360 | | |
| MPPT Voltage Range (V) | | | 125-500 | | |
| Start-up Voltage (V) | | | 150 | | |
| Number of MPPTs | 1 | 2 | 2 | 2 | 2 |
| Max. Number of PV String per MPPT | 1 | 1/1 | 1/1 | 1/1 | 1/1 |
| Max. PV Input Current (A) | 14 | 14/14 | 14/14 | 14/14 | 14/14 |
| Short-circuit Current of PV Input (A) | 17 | 17/17 | 17/17 | 17/17 | 17/17 |
| AC Input and Output (On-grid) | | | | | |
| Nominal Output Apparent Power (VA) | 3000 | 3680 | 4600 | 5000 ⁽¹⁾ | 6000 ⁽¹⁾ |
| Max. Output Apparent Power (VA) | 3000 | 3680 | 4600 ⁽²⁾ | 5000 ^{(1) (2)} | 6000 ⁽¹⁾⁽²⁾ |
| Max. Input Apparent Power (VA) | 6000 | 7360 | 7360 | 7360 | 7360 |
| Nominal AC Voltage (V) | | | 230 | | |
| Nominal Grid Frequency (Hz) | | | 50/60 | | |
| Max. Output Current (A) | 13.0 | 16.0 | 20.0 | 21.7 | 26.0 ⁽³⁾ |
| Max. Input Current (A) | 26.1 | 32.0 | 32.0 | 32.0 | 32.0 |
| Power Factor | | 0 | .8 leading 0.8 laggin | g | |
| Total Harmonic Distortion (@nominal output) | | | <3% | | |
| AC Output (Off-grid) | | | | | |
| Max. Output Apparent Power (VA) | 3000 | 3680 | 4600 | 5000 | 6000 |
| Peak Output Apparent Power (VA) ⁽⁴⁾ | 6000, 10s | 7360, 10s | 9200, 10s | 10000, 10s | 10000, 10s |
| Nominal AC Voltage (V) | | | 230 | | |
| Nominal AC Frequency (Hz) | | | 50/60 | | |
| Max. Output Current (A) | 13.0 | 16.0 | 20.0 | 21.7 | 26.0 |
| Total Harmonic Distortion (@ linear load) | | | <3% | | |

Single-phase Hybrid Inverter

HYS-3.0LV-EUG1 HYS-3.6LV-EUG1 HYS-4.6LV-EUG1 HYS-5.0LV-EUG1 HYS-6.0LV-EUG1

Max. Efficiency 97.6%, European Efficiency 97.0% Oouble MPPT tracker, up to 14 A MPPT current DC/AC ratio up to 150%

Ultralight for easy installation and space-saving

(ingrited

Support both DC-coupled and AC-coupled system

EMS has integrated with self-consumption, economic and backup modes for multi-scenario application

Built-in dry contact flexibly set to earth fault alarm, load control or generator control

Remote monitoring through S-Miles Cloud

| Model | HYS-3.0LV-EUG1 | HYS-3.6LV-EUG1 | HYS-4.6LV-EUG1 | HYS-5.0LV-EUG1 | HYS-6.0LV-EUG1 | |
|--|-------------------------------------|----------------|--------------------------|----------------|----------------|--|
| Efficiency | | | | | | |
| Max. Efficiency | 97.6% | 97.6% | 97.6% | 97.6% | 97.6% | |
| Euro Efficiency | 97.0% | 97.0% | 97.0% | 97.0% | 97.0% | |
| Max. Battery to Load Efficiency | 95.0% | 95.0% | 95.0% | 95.0% | 95.0% | |
| MPPT Efficiency | 99.9% | 99.9% | 99.9% | 99.9% | 99.9% | |
| Protection | | | | | | |
| Anti-islanding Protection | | | Integrated | | | |
| PV String Input Reverse Polarity Protection | | | Integrated | | | |
| Insulation Resistor Detection | | | Integrated | | | |
| Residual Current Monitoring Unit | | | Integrated | | | |
| AC Over Current Protection | | | Integrated | | | |
| AC Short Current Protection | | | Integrated | | | |
| AC Overvoltage and Undervoltage Protection | | | Integrated | | | |
| Surge Protection | | | DC Type II / AC Type III | | | |
| General | | | | | | |
| Dimension (W × H × D [mm]) | 502 × 461× 202 | | | | | |
| Weight (kg) | 24 | | | | | |
| Mounting | | | Wall Mounting | | | |
| Operation Temperature (°C) | -25 to + 65 (>45, derating) | | | | | |
| Relative Humidity | | | 0-95%, no condensing | | | |
| Altitude (m) | | | ≤2000 | | | |
| Cooling | | | Natural Convection | | | |
| Protection Degree | | | IP65 | | | |
| Noise (dB [A]) | | | <40 | | | |
| User Interface | | | LED & App | | | |
| Communication with BMS | | | RS485, CAN | | | |
| Communication with Meter | | | RS485 | | | |
| Communication Interface | RS485, Wi-Fi/Ethernet/4G (optional) | | | | | |
| Digital Input/Output | | | DRM, 1 × DI, 2 × DO | | | |
| Isolation Method (Solar / Battery) | | Transform | erless / High-frequency | y Isolation | | |
| Certifications and Standards | | | | | | |
| Grid Regulation | | EN 50549 | , VDE-AR-N 4105, AS/N | ZS 4777.2 | | |
| Safety Regulation | IEC 62109-1, IEC 62109-2 | | | | | |
| EMC | EN 61000-6-1, EN 61000-6-3 | | | | | |



Built-in dry contact flexibly monitors earth fault alarm and provides load control or generator control

EMS has integrated with self-consumption, economic and backup modes, offering multiscenario solutions for daily life. -

Technical Specifications

| Model | HYT-5.0HV-EUG1 | HYT-6.0HV-EUG1 | HYT-8.0HV-EUG1 | HYT-10.0HV-EUG1 | HYT-12.0HV-EUG1 |
|---|----------------|----------------|----------------------|-----------------|-----------------|
| Battery | | | | | |
| Battery Type | | | Li-ion | | |
| Nominal Battery Voltage (V) | | | 500 | | |
| Voltage Range (V) | | | 170-600 | | |
| Max. Charge Current (A) | 20 | 20 | 30 | 30 | 30 |
| Max. Discharge Current (A) | 20 | 20 | 30 | 30 | 30 |
| Rated Power (W) | 5000 | 6000 | 8000 | 10000 | 10000 |
| Charging Strategy | | | Self-adaption to BMS | ; | |
| PV Input | | | | | |
| Max. PV Input Power (W) | 7500 | 9000 | 12000 | 15000 | 15000 |
| /lax. PV Input Voltage (V) | | | 1000 | | |
| Nominal Input Voltage (V) | | | 720 | | |
| /IPPT Voltage Range (V) | | | 200-950 | | |
| Start-up Voltage (V) | | | 250 | | |
| Number of MPPTs | 2 | 2 | 2 | 2 | 2 |
| Max. Number of PV String per MPPT | 1/1 | 1/1 | 1/1 | 1/2 | 1/2 |
| Max. PV Input Current (A) | 14/14 | 14/14 | 14/14 | 14/28 | 14/28 |
| Short-circuit Current of PV Input (A) | 17/17 | 17/17 | 17/17 | 17/34 | 17/34 |
| AC Input and Output (On-grid) | | | | | |
| Nominal Output Apparent Power (VA) | 5000 | 6000 | 8000 | 10000 | 12000 |
| Max. Output Apparent Power (VA) | 5500 | 6600 | 8800 | 11000 | 12000 |
| Max. Input Apparent Power (VA) | 10000 | 12000 | 16000 | 16000 | 16000 |
| Nominal AC Voltage (V) | | | 400/380, 3L/N/PE | | |
| Nominal Grid Frequency (Hz) | | | 50/60 | | |
| Max. Output Current (A) | 8.3 | 10.0 | 13.3 | 16.7 | 17.4 |
| Max. Input Current (A) | 15.2 | 18.2 | 24.2 | 24.2 | 24.2 |
| Power Factor | | 0 | .8 leading 0.8 laggi | ng | |
| Total Harmonic Distortion @nominal output) | | | <3% | | |
| AC Output (Off-grid) | | | | | |
| Max. Output Apparent Power (VA) | 5000 | 6000 | 8000 | 10000 | 12000 |
| Peak Output Apparent Power (VA) | 10000, 10s | 12000, 10s | 16000, 10s | 16000, 10s | 16000, 10s |
| Nominal AC Voltage (V) | | | 400/380, 3L/N/PE | | |
| Nominal AC Frequency (Hz) | | | 50/60 | | |
| Max. Output Current (A) | 8.3 | 10.0 | 13.3 | 16.7 | 17.4 |
| Total Harmonic Distortion (@linear load) | | | <3% | | |

| Model | HYT-5.0HV-EUG1 | HYT-6.0HV-EUG1 | HYT-8.0HV-EUG1 | HYT-10.0HV-EUG1 | HYT-12.0HV-EUG1 | |
|--|----------------------------|----------------|------------------------------------|-----------------|-----------------|--|
| Efficiency | | | | | | |
| Max. Efficiency | 97.6% | 97.6% | 97.6% | 97.6% | 97.6% | |
| Euro Efficiency | 97.0% | 97.0% | 97.0% | 97.0% | 97.0% | |
| Max. Battery to Load Efficiency | 97.5% | 97.5% | 97.5% | 97.5% | 97.5% | |
| MPPT Efficiency | 99.9% | 99.9% | 99.9% | 99.9% | 99.9% | |
| Protection | | | | | | |
| Anti-islanding Protection | | | Integrated | | | |
| PV String Input Reverse Polarity Protection | | | Integrated | | | |
| Insulation Resistor Detection | | | Integrated | | | |
| Residual Current Monitoring Unit | | | Integrated | | | |
| AC Over Current Protection | | | Integrated | | | |
| AC Short Current Protection | | | Integrated | | | |
| AC Overvoltage and Undervoltage Protection | | | Integrated | | | |
| Surge Protection | | | DC Type II / AC Type II | I | | |
| General | | | | | | |
| Dimension (W \times H \times D [mm]) | | | 502 × 486 × 202 | | | |
| Weight (kg) | | 26.5 | | | | |
| Mounting | | Wall Mounting | | | | |
| Operation Temperature (°C) | | -2 | 5 to + 65 (>45, deratir | ng) | | |
| Relative Humidity | | | 0-95%, no condensing | 9 | | |
| Altitude (m) | | | ≤2000 | | | |
| Cooling | | | Natural convection | | | |
| Protection Degree | | | IP65 | | | |
| Noise (dB [A]) | | | <40 | | | |
| User Interface | | | LED & App | | | |
| Communication with BMS | | | RS485, CAN | | | |
| Communication with Meter | | | RS485 | | | |
| Communication Interface | | RS485 | , Wi-Fi/Ethernet/4G (oj | otional) | | |
| Digital Input/output | | | DRM, $1 \times DI$, $2 \times DO$ | | | |
| Isolation Method (Solar/Battery) | | Transf | formerless / Transform | nerless | | |
| Certifications and Standards | | | | | | |
| Grid Regulation | | EN 50549 | , VDE-AR-N 4105, AS/N | JZS 4777.2 | | |
| Safety Regulation | IEC 62109-1, IEC 62109-2 | | | | | |
| EMC | EN 61000-6-1, EN 61000-6-3 | | | | | |

Single-phase AC-coupled Inverter

HAS-3.0LV-EUG1 HAS-3.6LV-EUG1 HAS-4.6LV-EUG1 HAS-5.0LV-EUG1

The HAS-LV-EUG1 Series is designed for retrofitting PV systems, including power classes ranging from 3 kW to 5 kW. It can be installed with existing PV inverters, forming an AC coupling system.

he intelligent EMS function supports elf-consumption mode, economic mode, nd backup mode for multi-scenario pplications.

Moreover, the remote monitoring management through S-Miles Cloud allows users to track the full status of the system operation over time, maximizing power and energy utilization.

Max. Efficiency 95.2%

Ultralight for easy installation and space-saving



Built-in dry contact flexibly monitors earth fault alarm and provides load control or generator control

Remote monitoring through S-Miles Cloud

The intelligent EMS has self-consumption, economic and backup modes, offering multi-scenario solutions for daily life

Technical Specifications

| Model | HAS-3.0LV-EUG1 | |
|---|----------------|--|
| Battery | | |
| Battery Type | | |
| Nominal Battery Voltage (V) | | |
| Voltage Range (V) | | |
| Max. Charge Current (A) | 75 | |
| Max. Discharge Current (A) | 75 | |
| Max. Power (W) | 3000 | |
| Charging Strategy for Li-ion Battery | | |
| Charging Curve | | |
| External Temperature Sensor | | |
| AC Input and Output (On-grid) | | |
| Nominal Output Apparent Power (VA) | 3000 | |
| Max. Output Apparent Power (VA) | 3000 | |
| Max. Input Apparent Power (VA) | 6000 | |
| Nominal AC Voltage (V) | | |
| Nominal Grid Frequency (Hz) | | |
| Max. Output Current (A) | 13.0 | |
| Max. Input Current (A) | 26.1 | |
| Power Factor | | |
| Total Harmonic Distortion (@ nominal output) | | |
| AC Output (Off-grid) | | |
| Max. Output Apparent Power (VA) | 3000 | |
| Peak Output Apparent Power (VA) | 3300, 10s | |
| Nominal AC Voltage (V) | | |
| Nominal AC Frequency (Hz) | | |
| Max. Output Current (A) | 13.0 | |
| Total Harmonic Distortion (@ linear load) | | |
| Efficiency | | |
| Max. Efficiency | 95.2% | |
| Protection | | |
| Anti-islanding Protection | | |
| AC Over Current Protection | | |
| AC Short Current Protection | | |
| AC Overvoltage and Undervoltage Protection | | |
| Surge Protection | | |

| AS-3.6LV-EUG1 | HAS-4.6LV-EUG1 | HAS-5.0LV-EUG1 | |
|--------------------------|---------------------|------------------------|--|
| | | | |
| Li-ion / L | ead-acid | | |
| 4 | -8 | | |
| 40 | -60 | | |
| 90 | 100 | 100 | |
| 90 | 100 | 100 | |
| 3600 | 4600 | 5000 | |
| Self-adapt | ion to BMS | | |
| 3 Stages / E | Equalization | | |
| Opti | ional | | |
| | | | |
| 3680 | 4600 | 5000 ⁽¹⁾ | |
| 3680 | 4600 ⁽²⁾ | 5000 ⁽¹⁾⁽²⁾ | |
| 7360 | 7360 | 7360 | |
| 23 | 30 | | |
| 50 | / 60 | | |
| 16.0 | 20.0 | 21.7 | |
| 32.0 | 32.0 | 32.0 | |
| 0.8 leading . | 0.8 lagging | | |
| < | 3% | | |
| | | | |
| 3680 | 4600 | 5000 | |
| 4048 105 | 5060 10s | 5500 10s | |
| 1010, 103 | 3000, 103 | 5500, 105 | |
| 2. | 160 | | |
| 10.0 | 20.0 | 24 7 | |
| 16.0 | 20.0 | 21.7 | |
| < | 3% | | |
| | | | |
| 95.2% | 95.2% | 95.2% | |
| | | | |
| Integ | rated | | |
| Integrated | | | |
| Integ | rated | | |
| Integ | rated | | |
| DC Type II / AC Type III | | | |

Technical Specifications

| Model | HAS-3.0LV-EUG1 | HAS-3.6LV-EUG1 | HAS-4.6LV-EUG1 | HAS-5.0LV-EUG1 |
|------------------------------|--|----------------|----------------|----------------|
| General | | | | |
| Dimensions (W × H × D [mm]) | | 502 × 46 | 51 × 202 | |
| Weight (kg) | | 2 | 1 | |
| Mounting | | Wall Mo | ounting | |
| Operation Temperature (°C) | | -25 to +65 (> | 45, derating) | |
| Relative Humidity | | 0-95%, no d | condensing | |
| Altitude (m) | | < 20 | 000 | |
| Cooling | | Natural C | onvection | |
| Protection Degree | IP65 | | | |
| Noise (dB [A]) | < 40 | | | |
| User Interface | LED & App | | | |
| Communication with BMS | RS485, CAN | | | |
| Communication with Meter | RS485 | | | |
| Communication Interface | RS485, Wi-Fi/Ethernet/4G (optional) | | | |
| Digital Input/Output | DRM, $1 \times DI$, $2 \times DO$ | | | |
| Isolation Method (Battery) | High-frequency Isolation | | | |
| Certifications and Standards | | | | |
| Grid Regulation | EN 50549, VDE-AR-N 4105, AS/NZS 4777.2 | | | |
| Safety Regulation | IEC 62109-1, IEC 62109-2, IEC 62477-1 | | | |
| EMC | EN 61000-6-1, EN 61000-6-3 | | | |

(1) 4600 for VDE-AR-N 4105 & VDE0126-1-1; 4999 for AS/NZS 4777.2 (2) Max. output apparent power 3680 VA for TOR Erzeuger Type A



Three-phase AC-coupled Inverter

HAT-5.0HV-EUG1 HAT-6.0HV-EUG1 HAT-8.0HV-EUG1 HAT-10.0HV-EUG1

The HAT-HV-EUG1 Series is designed for retrofitting PV systems, including power classes ranging from 5 kW to 10 kW. It can be installed with existing PV inverters, forming an AC coupling system.

The intelligent EMS function supports selfconsumption mode, economic mode, and backup mode for multi-scenario applications.

Moreover, the remote monitoring management through S-Miles Cloud allows users to track the full status of the system operation over time, maximizing power and energy utilization.

Max. Efficiency 97.5%

Ultralight for easy installation and space-saving

Compatible with any grid-tied PV system

Built-in dry contact flexibly monitors earth fault alarm and provides load control or generator control

Remote monitoring through S-Miles Cloud

EMS has integrated with self-consumption, economic and backup modes, offering multiscenario solutions for daily life

Technical Specifications

| Model | HAT-5.0HV-EUG1 | |
|--|----------------|--|
| Battery | | |
| Battery Type | | |
| Nominal Battery Voltage (V) | | |
| Voltage Range (V) | | |
| Max. Charge Current (A) | 20 | |
| Max. Discharge Current (A) | 20 | |
| Max. Power (W) | 5000 | |
| Charging Strategy | | |
| AC Input and Output (On-grid) | | |
| Nominal Output Apparent Power (VA) | 5000 | |
| Max. Output Apparent Power (VA) | 5500 | |
| Max. Input Apparent Power (VA) | 10000 | |
| Nominal AC Voltage (V) | | |
| Nominal Grid Frequency (Hz) | | |
| Max. Output Current (A) | 8.3 | |
| Max. Input Current (A) | 15.2 | |
| Power Factor | | |
| Total Harmonic Distortion (@nominal output) | | |
| AC Output (Off-grid) | | |
| Max. Output Apparent Power (VA) | 5000 | |
| Peak Output Apparent Power (VA) | 10000, 10s | |
| Nominal AC Voltage (V) | | |
| Nominal AC Frequency (Hz) | | |
| Max. Output Current (A) | 8.3 | |
| Total Harmonic Distortion (@ linear load) | | |
| Efficiency | | |
| Max. Efficiency | 97.5% | |
| Protection | | |
| Anti-islanding Protection | | |
| AC Over Current Protection | | |
| AC Short Current Protection | | |
| AC Overvoltage and Undervoltage Protection | | |
| Surge Protection | | |

| IAT-6.0HV-EUG1 | HAT-8.0HV-EUG1 | HAT-10.0HV-EUG1 |
|----------------|----------------|-----------------|
| | | |
| Li-i | on | |
| 50 | 00 | |
| 170- | -600 | |
| 20 | 30 | 30 |
| 20 | 30 | 30 |
| 6000 | 8000 | 10000 |
| Self-adapti | on to BMS | |
| | | |
| 6000 | 8000 | 10000 |
| 6600 | 8800 | 11000 |
| 12000 | 16000 | 16000 |
| 400/380, | | |
| 50/ | /60 | |
| 10.0 | 13.3 | 16.7 |
| 18.2 | 24.2 | 24.2 |
| 0.8 leading | . 0.8 lagging | |
| <3 | 3% | |
| | | |
| 6000 | 8000 | 10000 |

| 6000 | 8000 | 10000 | | |
|------------|------------|------------|--|--|
| 12000, 10s | 16000, 10s | 16000, 10s | | |
| 400/380 | , 3L/N/PE | | | |
| 50 | /60 | | | |
| 10.0 | 13.3 | 16.7 | | |
| < 3% | | | | |
| | | | | |
| 97.5% | 97.5% | 97.5% | | |
| | | | | |
| | | | | |

| Integrated | |
|--------------------------|--|
| Integrated | |
| Integrated | |
| Integrated | |
| DC Type II / AC Type III | |

| Model | HAT-5.0HV-EUG1 | HAT-6.0HV-EUG1 | HAT-8.0HV-EUG1 | HAT-10.0HV-EUG1 |
|----------------------------------|--|-----------------|----------------|-----------------|
| General | | | | |
| Dimensions (W × H × D [mm]) | | 502 × 48 | 6 × 202 | |
| Weight (kg) | | 23 | 3 | |
| Mounting | | Wall Mo | unting | |
| Operating Temperature Range (°C) | | -25 to + 65 (> | 45, derating) | |
| Relative Humidity | | 0-95%, no c | ondensing | |
| Altitude (m) | | < 20 | 00 | |
| Cooling | Natural Convection | | | |
| Protection Degree | IP65 | | | |
| Noise (dB [A]) | < 40 | | | |
| User Interface | LED & App | | | |
| Communication with BMS | RS485, CAN | | | |
| Communication with Meter | RS485 | | | |
| Communication Interface | RS485, Wi-Fi/Ethernet/4G (optional) | | | |
| Digital Input/Output | DRM, $1 \times DI$, $2 \times DO$ | | | |
| Isolation Method (Battery) | Transformerless | | | |
| Certifications and Standards | | | | |
| Grid Regulation | EN 50549, VDE-AR-N 4105, AS/NZS 4777.2 | | | |
| Safety Regulation | IEC 62109-1, IEC 62109-2, IEC 62477-1 | | | |
| EMC | EN 61000-6-1, EN 61000-6-3 | | | |





Integrated to use, simply plug and play

 \checkmark

IP65 protection

Remote maintenance of energy storage system on S-Miles Cloud platform

Stable and reliable data transmission

Technical Specifications



| Model | |
|--------------------------------------|--|
| Communication | |
| Max. Inverter Supported | |
| Sample Rate | |
| Indicator | |
| Connection Interface | |
| Wireless Standard | |
| Frequency Range | |
| Configuration Method | |
| General | |
| Operating Voltage | |
| Power Consumption | |
| Dimensions (W \times H \times D) | |
| Weight | |
| Protection Degree | |
| Installation Method | |
| Environment | |
| Operating Temperature Range | |
| Relative Humidity | |
| Operating Altitude | |
| Certifications and Standards | |
| Certificate | |

DTS-WIFI-G1

10

15 minutes

LED

USB

802.11b/g/n

2.412 GHz - 2.484 GHz

App / Web

DC 5 V

 $\leq 5 \text{ W}$

108 × 57 × 36 mm (4.3 × 2.2 × 1.4 inch) 60 g (0.13 lb)

IP65

Insert + Screw

-25°C to 65°C (-13°F to 149°F)

0-95%, no condensing

≤ 4000 m

CE / RCM

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Technical Specifications

Technical Specifications



| Model | DTS-Ethernet-G1 |
|--------------------------------------|--|
| Communication | |
| Max. Inverter Supported | 10 |
| Sample Rate | 15 minutes |
| Indicator | LED |
| Connection Interface | USB |
| Ethernet Interface | RJ45 |
| Ethernet Interface Standard | 10Base-T / 100Base-T |
| Max. Distance of Network Cable | 80 m |
| Configuration Method | App / Web |
| General | |
| Operating Voltage | DC 5 V |
| Power Consumption | ≤ 5 W |
| Dimensions (W \times H \times D) | 108 × 57 × 36 mm (4.3 × 2.2 × 1.4 inch) |
| Weight | 130 g (0.22 lb) |
| Protection Degree | IP65 |
| Installation Method | Insert + Screw |
| Environment | |
| Operating Temperature Range | -25°C to 65°C (-13°F to 149°F) |
| Relative Humidity | 0-95%, no condensing |
| Operating Altitude | ≤ 4000 m |
| Certifications and Standards | |
| Certificate | CE / RCM |



| Model | DTS-4G-G1 |
|--------------------------------------|---|
| Communication | |
| Max. Inverter Supported | 10 |
| Sample Rate | 15 minutes |
| Indicator | LED |
| Connection Interface | USB |
| 4G Standard & Frequency Range | 4G: LTE-FDD / LTE-TDD 3G: WCDMA / HSDPA / HSUPA / HSPA+ 2G: GSM / GPRS / EDGE |
| Configuration Method | App / Web |
| General | |
| Operating Voltage | DC 5 V |
| Power Consumption | ≤ 5 W |
| Dimensions (W \times H \times D) | $108 \times 57 \times 36 \text{ mm}$ |
| Weight | 80 g (0.18 lb) |
| Protection Degree | IP65 |
| Installation Method | Insert + Screw |
| Environment | |
| Operating Temperature Range | -25°C to 65°C (-13°F to 149°F) |
| Relative Humidity | 0-95%, no condensing |
| Operating Altitude | ≤ 4000 m |
| Certifications and Standards | |
| Certificate | CE / RCM |

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Rapid Shutdown HRSD-1C

connected with one module. It meets



SunSpec Certified Meets SunSpec RSD requirements

PLC communication Realize rapid shutdown with Transmitter





High Efficiency Lower power consumption and wider operating voltage range



Much lower than arc noise. No risk of triggering AFCI

Technical Specifications

| Model | |
|-----------------------------|----------|
| Electrical | |
| Input Voltage Range | |
| Maximum Current | |
| Maximum System Voltage | |
| Communication Type | |
| Shutdown Output Voltage | |
| Power Consumption | |
| Mechanical | |
| Input Connectors | |
| Input Cable Length | |
| Output Connectors | |
| Output Cable Length | |
| Dimensions | |
| Environmental | |
| Operating Temperature Range | |
| Outdoor Rating | |
| Compliance | |
| Safety | UL17 |
| EMC | FCC Part |

*1: Fits PV module in landscape and portrait installation.



| HRSD-1C | |
|----------------------------------|--|
| | |
| 8-80 V | |
| 15 A (20 A or 25 A optional) | |
| 1000 V (1500 V optional) | |
| SunSpec PLC | |
| 1 V | |
| 200 mW | |
| | |
| MC4 (standard) | |
| 0.15 m | |
| MC4 (standard) | |
| 1.2 m ¹ | |
| 113 x 54 x 16 mm | |
| | |
| -40°C to +85°C (-40°F to +185°F) | |
| IP68 / NEMA6P | |

741, CSA C22.2 No. 330-17, IEC/EN 62109-1

FCC Part15 Class B, ICES-003, IEC/EN 61000-6-1/-2/-3/-4



| Model | |
|-----------------------------|----------|
| Electrical | |
| Input Voltage Range | |
| Output Voltage Range | |
| Maximum Current | |
| Maximum System Voltage | |
| Communication Type | |
| Shutdown Output Voltage | |
| Power Consumption | |
| Mechanical | |
| Input Connectors | |
| Input Cable Length | |
| Output Connectors | |
| Output Cable Length | |
| Dimensions | |
| Environmental | |
| Operating Temperature Range | |
| Outdoor Rating | |
| Compliance | |
| Safety | UL1 |
| EMC | FCC Part |
| | |

*1 Fits PV module in landscape and portrait installation.



Rapid Shutdown HRSD-2C



199.3

and SunSpec RSD requirements



PLC communication Realize rapid shutdown with Transmitter





High Efficiency Lower power consumption and wider operating voltage range



Low Noise

Much lower than arc noise. No risk of triggering AFCI

| HRSD-2C | |
|----------------------------------|--|
| | |
| 8-80 V | |
| 16-160 V (8-80 V per input) | |
| 15 A (20 A or 25 A optional) | |
| 1000 V (1500 V optional) | |
| SunSpec PLC | |
| 1V | |
| 200 mW | |
| | |
| MC4 (standard) | |
| 0.45 m | |
| MC4 (standard) | |
| 2.4 m ¹ | |
| 133 x 58 x 16 mm | |
| | |
| -40°C to +85°C (-40°F to +185°F) | |
| IP68 / NEMA6P | |
| | |

741, CSA C22.2 No. 330-17, IEC/EN 62109-1

t15 Class B, ICES-003, IEC/EN 61000-6-1/-2/-3/-4



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Transmitter

Module-level rapid shutdown with Hoymiles HRSD

Realize rapid shutdown by simply powering off the transmitter or using an external initiator

Equipped with single/dual core

Meets NEC 2017&NEC 2020 (690.12) and SunSpec RSD requirements

Weatherproof outdoor enclosure

Includes power supply

Technical Specifications

| Model |
|--|
| Electrical |
| Power Supply Input Voltage |
| Transmitter Input Voltage |
| Transmitter Input Current |
| Communication Type |
| Core |
| Max. Number of Configure Core |
| Max. Current per Core |
| Max. String Voltage |
| Max. Number of Strings per Core ¹ |
| Mechanical |
| Dimensions |
| Mounting Type |
| Environmental |
| Operating Temperature Range |
| Outdoor Rating |
| Compliance |
| Safety |
| EMC |

*1 According to the cable diameter Φ 6 mm, if cable diameter is more Care should also be taken not to exceed the allowable current.



Unit : mm

Power Supply (optional)

| HT10-Kit |
|--|
| |
| 85-264 VAC |
| 12 VDC (+/-2%) |
| 1 A |
| SunSpec PLC |
| |
| 2 |
| 75 A 150 A |
| 1500 VDC |
| 5 15 |
| |
| 198.5 x 298 x 179 mm |
| Wall mounted |
| |
| -40°C to +85°C (-40°F to +185°F) |
| IP65/NEMA4 |
| |
| UL1741, CSA C22.2 No. 330-17 |
| FCC Part15 Class B, ICES-003 |
| re than Φ 6 mm, Strings Per Core will be reduced. |
| |



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