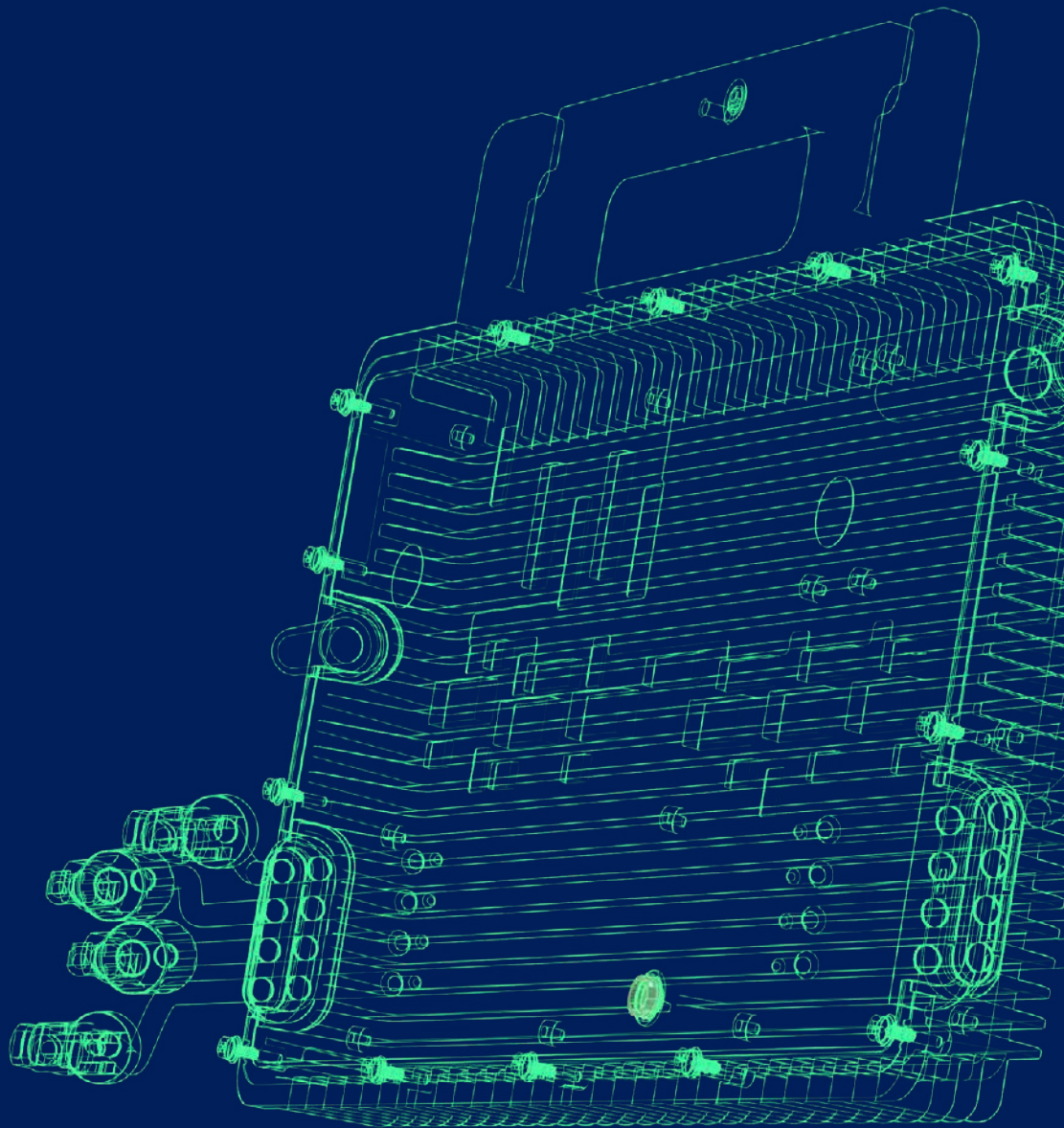




PRODUCT BROCHURE

FOR **NORTH AMERICA**



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 clean energy solution provider, specializing in module-level inverters and storage systems. Our products cater to residential, commercial, industrial, and utility-scale applications. 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, 1600+ global experts and distribution & service network spanning North America, South America, Europe, Asia, Africa and Oceania, Hoymiles has empowered homeowners and professionals in 190 countries and regions to join the journey to true open energy.

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

Product Portfolio

Microinverter

Single-phase | HM Series

- 06 · HM-1500N
- 08 · HM-300NT / HM-350NT / HM-400NT
- 10 · HM-600NT / HM-700NT / HM-800NT
- 12 · HM-1200NT

Single-phase | HMS Series

- 14 · HMS-350-1T-NA / HMS-400-1T-NA / HMS-450-1T-NA / HMS-500-1T-NA
- 16 · HMS-700-2T-NA / HMS-800-2T-NA / HMS-900-2T-NA / HMS-1000-2T-NA
- 18 · HMS-1600-4T-NA / HMS-1800-4T-NA / HMS-2000-4T-NA

Combiner Box

- 20 · Combiner Box HMS-C

Accessories

- 22 · HM-N Cable Accessories
- 26 · HM/HMS Cable Accessories
- 28 · Flex-S3 Cable Accessories

Three-phase | HMT Series

- 30 · HMT-1600-4T-208-NA/HMT-1800-4T-208-NA/HMT-2000-4T-208-NA

Accessories

- 32 · Flex-T5 Cable Accessories

Data Transfer Unit

- 34 · DTU-Pro
- 36 · DTU-Pro-S

Energy Storage System

Hybrid Inverter 48V

- 38 · HYS-3.8LV-USG1 / HYS-4.8LV-USG1 / HYS-6.0LV-USG1 / HYS-7.6LV-USG1
- HYS-9.6LV-USG1 / HYS-11.5LV-USG1

AC-coupled Inverter

- 40 · HAS-3.8LV-USG1 / HAS-4.8LV-USG1 / HAS-6.0LV-USG1 / HAS-7.6LV-USG1
- HAS-9.6LV-USG1 / HAS-11.5LV-USG1

Low Voltage Battery

- 42 · LB-10D-USG2

Data Transfer Stick

- 44 · DTS-Wi-Fi-G1 / DTS-Ethernet-G1 / DTS-4G-G1

Smart Meter

- 48 · DTSU666 (CT-2 × 250 A)

Rapid Shutdown

- 50 · HRSD-2C

Why Hoymiles

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

- High cost efficiency (Lower LCOE)
- Low start-up voltage

Smarter

- Module-level monitoring for remote trouble shooting & maintenance

More Efficient

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

Installer Friendly

- Full product range: 1-1 to 4-1, 300W-2000W
- Easily install units in challenging conditions and positions
- Plug-and-play, easy installation

Safer

- Up to 65V DC input voltage to eliminate the risk of a rooftop fire
- IP67

More Reliable

- Low failure rate (0.18%)
- IEEE 1547





Microinverter Datasheet

HM-1500N

The HM-1500N is a cost-effective, module-level solar solution that supports up to 4 panels at once, optimizing the PV production of your installation. With a maximum DC voltage of 60V, the HM-1500N meets the requirements for PV Rapid Shutdown Equipment and complies with NEC-2017 and NEC-2020 Article 690.12 as well as CEC-2021 Sec 64-218. It also includes reactive power control and meets the standard for IEEE 1547, UL 1741, and CA Rule 21.

✓ With Reactive Power Control, compliant with CA Rule 21

✓ External antenna for stronger communication with DTU

✓ Easy installation, just plug and play

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

✓ High reliability, NEMA 6 (IP67) enclosure, 6000 V surge protection

Technical Specifications

Model	HM-1500N	
Input Data (DC)		
Commonly used module power (W)	300 to 505+	
Maximum input voltage (V)	60	
MPPT voltage range (V)	16-60	
Start-up voltage (V)	22	
Maximum input current (A)	4 × 11.5	
Maximum input short circuit current (A)	4 × 15	
Number of MPPTs	2	
Number of inputs per MPPT	2	
Output Data (AC)		
Peak output power (VA)	1500	1350
Maximum continuous output power (VA)	1438	1246
Maximum continuous output current (A)	5.99	5.99
Nominal output voltage/range (V) ¹	240/211-264	208/183-228
Nominal frequency/range (Hz) ¹	60/55-65	
Power factor (adjustable)	>0.99 default 0.8 leading ... 0.8 lagging	
Total harmonic distortion	<3%	
Maximum units per 12 AWG branch ²	2	2
Efficiency		
CEC peak efficiency	96.7%	
CEC weighted efficiency	96.5%	
Nominal MPPT efficiency	99.8%	
Nighttime power consumption (mW)	<50	
Mechanical Data		
Ambient temperature range (°C)	-40 to +65	
Dimensions (W × H × D mm)	280 × 176 × 33	
Weight (kg)	3.75	
Enclosure rating	Outdoor-NEMA 6 (IP67)	
Cooling	Natural convection – No fans	
Features		
Communication	2.4GHz Proprietary RF (Nordic)	
Monitoring	S-Miles Cloud ³	
Warranty	Up to 25 years	
Compliance	UL 1741, IEEE 1547, UL 1741 SA (240 Vac), UL 1741 SB, CA Rule 21 (240 Vac), CSA C22.2 No. 107.1-16, FCC Part 15B, FCC Part 15C	
PV Rapid Shutdown	Conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218 Rapid Shutdown of PV Systems	

*1 Nominal voltage/frequency range can vary depending on local requirements.

*2 Refer to local requirements for exact number of microinverters per branch.

*3 Hoymiles Monitoring System.



Single-phase
Microinverter

HM-300NT
HM-350NT
HM-400NT

Hoymiles 1-in-1 microinverter, which can be connected to one panel and used in various applications, is one of the most flexible solar solutions. With a maximum DC voltage of 60 V, Hoymiles microinverter is a PV Rapid Shutdown Equipment and conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218.

All of the three models listed are equipped with reactive power control and can meet the requirements of IEEE 1547, UL 1741 and CA Rule21.

- ✓ External antenna for stronger communication with DTU
- ✓ High reliability: NEMA 6 (IP67) enclosure, 6000 V surge protection

- ✓ Easy installation, just plug and play
- ✓ With Reactive Power Control, compliant with CA Rule 21
- ✓ Compliant with U.S. NEC-2017&NEC-2020 690.12 rapid shutdown

Technical Specifications

Model	HM-300NT		HM-350NT		HM-400NT	
Input Data (DC)						
Commonly used module power (W)	240 to 405+		280 to 470+		320 to 540+	
Maximum input voltage (V)			60			
MPPT voltage range (V)			16-60			
Start-up voltage (V)			22			
Maximum input current (A)	11.5		11.5		12.5	
Maximum input short circuit current (A)			15			
Number of MPPT			1			
Number of inputs per MPPT			1			
Output Data (AC)						
Peak output power (VA)	300		350		400	
Maximum continuous output power (VA)	295		349		382	
Maximum continuous output current (A)	1.23	1.42	1.45	1.68	1.59	1.84
Nominal output voltage/range (V) ¹	240/211-264	208/183-228	240/211-264	208/183-228	240/211-264	208/183-228
Nominal frequency/range (Hz) ¹	60/55-65					
Power factor (adjustable)	>0.99 default 0.8 leading ... 0.8 lagging					
Total harmonic distortion	<3%					
Maximum units per 10 AWG branch ²	19	16	16	14	15	13
Maximum units per 12 AWG branch ²	13	11	11	9	10	8
Efficiency						
CEC peak efficiency			96.7%			
CEC weighted efficiency			96.5%			
Nominal MPPT efficiency			99.8%			
Nighttime power consumption (mW)			<50			
Mechanical Data						
Ambient temperature range (°C)			-40 to +65			
Dimensions (W × H × D [mm])			182 × 164 × 29.5			
Weight (kg)			1.75			
Enclosure rating			Outdoor-NEMA 6 (IP67)			
Cooling			Natural convection – No fans			
Features						
Communication			2.4 GHz Proprietary RF (Nordic)			
Type of isolation			Galvanically Isolated HF Transformer			
Monitoring			S-Miles Cloud ³			
Warranty			Up to 25 years			
Compliance	UL 1741, IEEE 1547, UL 1741 SA (240 Vac), UL 1741 SB, CA Rule 21 (240 Vac) ⁴ , CSA C22.2 No. 107.1-16, FCC Part 15B, FCC Part 15C					
PV Rapid Shutdown	Conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218 Rapid Shutdown of PV Systems					

*1 Nominal voltage/frequency range can vary depending on local requirements.
*2 Refer to local requirements for exact number of microinverters per branch.
*3 Hoymiles Monitoring System
*4 The HM-400NT microinverter complies with both CA Rule 21 (240 Vac) and CA Rule 21 (208 Vac)



Single-phase
Microinverter

HM-600NT
HM-700NT
HM-800NT

Hoymiles 2-in-1 microinverter can connect up to 2 panels at once and maximize the PV production of your installation. With a maximum DC voltage of 60 V, Hoymiles microinverter is a PV Rapid Shutdown Equipment and conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218.

All of the three models listed are equipped with reactive power control and can meet the requirements of IEEE 1547, UL 1741 and CA Rule21.

- ✓ External antenna for stronger communication with DTU
- ✓ High reliability: NEMA 6 (IP67) enclosure, 6000 V surge protection

- ✓ Easy installation, just plug and play
- ✓ With Reactive Power Control, compliant with CA Rule 21
- ✓ Compliant with U.S. NEC-2017&NEC-2020 690.12 rapid shutdown

Technical Specifications

Model	HM-600NT		HM-700NT		HM-800NT	
Input Data (DC)						
Commonly used module power (W)	240 to 405+		280 to 470+		320 to 540+	
Maximum input voltage (V)			60			
MPPT voltage range (V)			16-60			
Start-up voltage (V)			22			
Maximum input current (A)	2 × 11.5		2 × 11.5		2 × 12.5	
Maximum input short circuit current (A)			2 × 15			
Number of MPPTs			2			
Number of inputs per MPPT			1			
Output Data (AC)						
Peak output power (VA)	600		700		800	
Maximum continuous output power (VA)	590		696		766	
Maximum continuous output current (A)	2.46	2.84	2.90	3.35	3.19	3.68
Nominal output voltage/range (V) ¹	240/211-264	208/183-228	240/211-264	208/183-228	240/211-264	208/183-228
Nominal frequency/range (Hz) ¹	60/55-65					
Power factor (adjustable)	> 0.99 default 0.8 leading ... 0.8 lagging					
Total harmonic distortion	< 3%					
Maximum units per 10 AWG branch ²	9	8	8	7	7	6
Maximum units per 12 AWG branch ²	6	5	5	4	5	4
Efficiency						
CEC peak efficiency			96.7%			
CEC weighted efficiency			96.5%			
Nominal MPPT efficiency			99.8%			
Nighttime power consumption (mW)			<50			
Mechanical Data						
Ambient temperature range (°C)			-40 to +65			
Dimensions (W × H × D [mm])			250 × 170 × 28			
Weight (kg)			2.6			
Enclosure rating			Outdoor-NEMA 6 (IP67)			
Cooling			Natural convection – No fans			
Features						
Communication			2.4 GHz Proprietary RF (Nordic)			
Type of isolation			Galvanically Isolated HF Transformer			
Monitoring			S-Miles Cloud ³			
Warranty			Up to 25 years			
Compliance			UL 1741, IEEE 1547, UL 1741 SA (240 Vac),UL 1741 SB, CA Rule 21 (240 Vac) ⁴ , CSA C22.2 No. 107.1-16, FCC Part 15B, FCC Part 15C			
PV Rapid Shutdown			Conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218 Rapid Shutdown of PV Systems			

*1 Nominal voltage/frequency range can vary depending on local requirements.
*2 Refer to local requirements for exact number of microinverters per branch.
*3 Hoymiles Monitoring System
* The HM-800NT microinverter complies with both CA Rule 21 (240 Vac) and CA Rule 21 (208 Vac).



Single-phase Microinverter

HM-1200NT

Hoymiles 4-in-1 microinverter is one of the most cost-effective module-level solar solutions, as it can support up to 4 panels at once and maximize the PV production of your installation. With a maximum DC voltage of 60 volts, Hoymiles microinverter is a PV Rapid Shutdown Equipment and conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218.

Both models listed are equipped with reactive power control and can meet the requirements of IEEE 1547, UL 1741 and CA Rule21.

- ✓ External antenna for stronger communication with DTU
- ✓ High reliability: NEMA 6 (IP67) enclosure, 6000 V surge protection

- ✓ Easy installation, just plug and play
- ✓ With Reactive Power Control, compliant with CA Rule 21
- ✓ Compliant with U.S. NEC-2017&NEC-2020 690.12 rapid shutdown

Technical Specifications

Model	HM-1200NT	
Input Data (DC)		
Commonly used module power (W)	240 to 405+	
Maximum input voltage (V)	60	
MPPT voltage range (V)	16-60	
Start-up voltage (V)	22	
Maximum input current (A)	4 × 11.5	
Maximum input short circuit current (A)	4 × 15	
Number of MPPTs	2	
Number of inputs per MPPT	2	
Output Data (AC)		
Peak output power (VA)	1200	1200
Maximum continuous output power (VA)	1200	1200
Maximum continuous output current (A)	5.00	5.77
Nominal output voltage/range (V) ¹	240/211-264	208/183-228
Nominal frequency/range (Hz) ¹	60/55-65	
Power factor (adjustable)	> 0.99 default 0.8 leading ... 0.8 lagging	
Total harmonic distortion	< 3%	
Maximum units per 10 AWG branch ²	4	
Efficiency		
CEC peak efficiency	96.7%	
CEC weighted efficiency	96.5%	
Nominal MPPT efficiency	99.8%	
Nighttime power consumption (mW)	<50	
Mechanical Data		
Ambient temperature range (°C)	-40 to +65	
Dimensions (W × H × D mm)	280 × 176 × 33	
Weight (kg)	3.35	
Enclosure rating	Outdoor-NEMA 6 (IP67)	
Cooling	Natural convection – No fans	
Features		
Communication	2.4 GHz Proprietary RF (Nordic)	
Type of isolation	Galvanically Isolated HF Transformer	
Monitoring	S-Miles Cloud ³	
Warranty	Up to 25 years	
Compliance	UL 1741, IEEE 1547, UL 1741 SB, UL 1741 SA (240 Vac), CA Rule 21 (240 Vac) ⁴ , CSA C22.2 No. 107.1-16, FCC Part 15B, FCC Part 15C	
PV Rapid Shutdown	Conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218 Rapid Shutdown of PV Systems	

*1 Nominal voltage/frequency range can vary depending on local requirements.
*2 Refer to local requirements for exact number of microinverters per branch.
*3 Hoymiles Monitoring System
*4 The HM-1500NT microinverter complies with both CA Rule 21 (240 Vac) and CA Rule 21 (208 Vac).



Single-phase
Microinverter

HMS-350-1T-NA
HMS-400-1T-NA
HMS-450-1T-NA
HMS-500-1T-NA

Hoymiles new microinverter HMS-500 series are suitable for high-powered solar panels, which rank among the highest for 1-in-1 microinverters. Each microinverter can be connected to one panel and used in various applications, making it one of the most flexible solar solutions. With a maximum DC voltage of 65 volts, Hoymiles microinverter is a PV Rapid Shutdown Equipment and conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218. The new Sub-1G wireless solution enables more stable communication with Hoymiles gateway DTU.

✓ High-powered microinverter for 1-in-1 series with superior performance

✓ With Reactive Power Control, compliant with UL 1741, IEEE 1547, UL 1741 SB, etc.

✓ Safer for rooftop solar stations with PV rapid shutdown compliance

✓ 1-in-1 design enables most flexible applications

Technical Specifications

Model	HMS-350-1T-NA		HMS-400-1T-NA		HMS-450-1T-NA		HMS-500-1T-NA	
Input Data (DC)								
Commonly used module power (W)	280 to 470+		320 to 540+		360 to 600+		400 to 670+	
Maximum input voltage (V)	60		65		65		65	
MPPT voltage range (V)	16–60							
Start-up voltage (V)	22							
Maximum input current (A)	13		14		15		16	
Maximum input short circuit current (A)	20		25		25		25	
Number of MPPTs	1							
Number of inputs per MPPT	1							
Output Data (AC)								
Peak output power (VA)	350		400		450		500	
Maximum continuous output power (VA)	319		360		410		475	
Maximum continuous output current (A)	1.33	1.53	1.50	1.73	1.71	1.98	1.98	2.28
Nominal output voltage/range (V) ¹	240/211–264	208/183–228	240/211–264	208/183–228	240/211–264	208/183–228	240/211–264	208/183–228
Nominal frequency/range (Hz) ¹	60/55–65							
Adjustable power factor (@nominal power)	> 0.99 default 0.8 leading ... 0.8 lagging							
Total harmonic distortion (@nominal power)	< 3%							
Maximum units per 10 AWG branch ²	18	15	16	13	14	12	12	10
Maximum units per 12 AWG branch ²	12	10	10	9	9	8	8	7
Efficiency								
CEC peak efficiency	96.70%				96.50%			
Nominal MPPT efficiency	99.80%							
Night power consumption (mW)	< 50							
Mechanical Data								
Ambient temperature range (°C)	-40 to +65							
Dimensions (W × H × D [mm])	182 × 164 × 30							
Weight (kg)	1.75							
Enclosure rating	Outdoor-IP67 (NEMA6)							
Cooling	Natural convection (no fans)							
Features								
Communication	Sub-1G							
Type of isolation	Galvanically Isolated HF Transformer							
Monitoring	Hoymiles S-Miles Cloud ³							
Compliance	UL 1741, IEEE 1547, UL 1741 SB, CSA C22.2 No. 107.1-16, CA Rule 21 (240 Vac), FCC 15B, FCC 15C							
PV Rapid Shutdown	Conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218 Rapid Shutdown of PV Systems.							

*1 Nominal voltage/frequency range can vary depending on local requirements.

*2 Refer to local requirements for exact number of microinverters per branch.

*3 Hoymiles Monitoring System



Single-phase
Microinverter

HMS-700-2T-NA
HMS-800-2T-NA
HMS-900-2T-NA
HMS-1000-2T-NA

Hoymiles new microinverter HMS-1000 series are suitable for high-powered solar panels, which rank among the highest for 2-in-1 microinverters. Each microinverter can connect up to 2 panels, with independent MPPT and monitoring maximizing the power production of your installation. With a maximum DC voltage of 65 volts, Hoymiles microinverter is a PV Rapid Shutdown Equipment and conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218. The new Sub-1G wireless solution enables more stable communication with Hoymiles gateway DTU.

- ✓

High-powered microinverter for 2-in-1 series with superior performance
- ✓

Independent MPPT and monitoring ensure greater energy harvest and easier maintenance
- ✓

2-in-1 design enables faster installation
- ✓

Safer for rooftop solar stations with PV rapid shutdown compliance
- ✓

With Reactive Power Control, compliant with UL 1741, IEEE 1547, UL 1741 SB, etc.
- ✓

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

Technical Specifications

Model	HMS-700-2T-NA		HMS-800-2T-NA		HMS-900-2T-NA		HMS-1000-2T-NA	
Input Data(DC)								
Commonly used module power (W)	280 to 470+		320 to 540+		360 to 600+		400 to 670+	
Maximum input voltage (V)	60		65		65		65	
MPPT voltage range (V)			16-60					
Start-up voltage (V)			22					
Maximum input current (A)	2 × 13		2 × 14		2 × 15		2 × 16	
Maximum input short circuit current (A)	2 × 20		2 × 25		2 × 25		2 × 25	
Number of MPPTs			2					
Number of inputs per MPPT			1					
Output Data(AC)								
Peak output power (VA)	700		800		900		1000	
Maximum continuous output power (VA)	638		720		820		958	
Maximum continuous output current (A)	2.66	3.07	3.00	3.46	3.42	3.94	3.99	4.61
Nominal output voltage/range (V) ¹	240/211-264	208/183-228	240/211-264	208/183-228	240/211-264	208/183-228	240/211-264	208/183-228
Nominal frequency/range (Hz) ¹			60/55-65					
Adjustable power factor (@nominal power)			> 0.99 default 0.8 leading ... 0.8 lagging					
Total harmonic distortion (@nominal power)			< 3%					
Maximum units per 10 AWG branch ²	9	7	8	6	7	6	6	5
Maximum units per 12 AWG branch ²	6	5	5	4	4	4	4	3
Efficiency								
CEC peak efficiency	96.70%				96.50%			
Nominal MPPT efficiency			99.80%					
Night power consumption (mW)			< 50					
Mechanical Data								
Ambient temperature range (°C)			-40 to +65					
Dimensions (W × H × D [mm])			261 × 180 × 35.1					
Weight (kg)			3.2					
Enclosure rating			Outdoor-IP67 (NEMA6)					
Cooling			Natural convection-No fans					
Features								
Communication			Sub-1G					
Type of isolation			Galvanically Isolated HF Transformer					
Monitoring			Hoymiles S-Miles Cloud ³					
Compliance			UL 1741, IEEE 1547, UL 1741 SB, CA Rule 21 (240 Vac) ⁴ , CSA C22.2 No. 107.1-16, FCC 15B, FCC 15C					
PV Rapid Shutdown			Conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218 Rapid Shutdown of PV Systems.					

*1 Nominal voltage/frequency range can vary depending on local requirements.
*2 Refer to local requirements for exact number of microinverters per branch.
*3 Hoymiles Monitoring System
*4 The HMS-1000-2T-NA microinverter complies with both CA Rule 21 (240 Vac) and CA Rule 21 (208 Vac).



Single-phase
Microinverter

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

Hoymiles new microinverter HMS-2000 series are suitable for high-powered solar panels, which rank among the highest for 4-in-1 microinverters. Each microinverter can connect up to 4 panels, with independent MPPT and monitoring maximizing the power production of your installation. With a maximum DC voltage of 65 volts, Hoymiles microinverter is a PV Rapid Shutdown Equipment and conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218. The new Sub-1G wireless solution enables more stable communication with Hoymiles gateway DTU.

- ✓

High-powered microinverter for 4-in-1 series with superior performance
- ✓

Independent MPPT and monitoring ensure greater energy harvest and easier maintenance
- ✓

Safer for rooftop solar stations with PV rapid shutdown compliance
- ✓

4-in-1 design enables most cost-effective solar solution
- ✓

With Reactive Power Control, compliant with UL 1741, IEEE 1547, UL 1741 SB, etc.
- ✓

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

Technical Specifications

Model	HMS-1600-4T-NA		HMS-1800-4T-NA		HMS-2000-4T-NA	
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)						
Peak output power (VA)	1600		1800		2000	
Maximum continuous output power (VA)	1440		1660		1918	
Maximum continuous output current (A)	6.00	6.92	6.92	7.98	7.99	9.22
Nominal output voltage/range (V)*	240/211–264	208/183–228	240/211–264	208/183–228	240/211–264	208/183–228
Nominal frequency/range (Hz)*	60/55–65					
Adjustable power factor (@nominal power)	> 0.99 default 0.8 leading ... 0.8 lagging					
Total harmonic distortion (@nominal power)	< 3%					
Maximum units per 10 AWG branch**	4	3	3	3	3	2
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 (°F)	-40 to +149 (-40 to +65°C)					
Dimensions (W × H × D [inch])	13.03 × 8.58 × 1.60 (331 × 218 × 40.6 mm)					
Weight (lbs)	12.26 (5.56 kg)					
Enclosure rating	Outdoor-NEMA 6 (IP67)					
Cooling	Natural convection-No fans					
Features						
Communication	Sub-1G					
Type of isolation	Galvanically Isolated HF Transformer					
Monitoring	S-Miles Cloud (Hoymiles Monitoring Platform)					
Compliance	UL 1741, IEEE 1547, UL 1741 SB, CA Rule 21 (240 Vac)*** , CSA C22.2 No. 107.1-16, FCC 15B, FCC 15C					
PV Rapid Shutdown	Conforms with NEC-2017, NEC-2020 Article 690.12, and CEC-2021 Sec 64-218 Rapid Shutdown of PV Systems					

* : Nominal voltage/frequency range can vary depending on local requirements.
** : Refer to local requirements for the exact number of microinverters per branch.
***: The HMS-2000-4T-NA microinverter complies with both CA Rule 21 (240 Vac) and CA Rule 21 (208 Vac).

Cable Accessories for Microinverter of HM-N Series



AC Connector – F

Can be connected with the AC Connector – M of the microinverter. Used for making AC end cable or AC extension cable.



AC Connector – M

Can be connected with the AC Connector – F of the microinverter. Used for making AC end cable or AC extension cable.



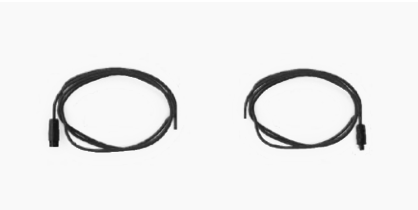
AC Connector Cap – F

Used to protect vacant AC Connector – F.



AC Connector Cap – M

Used to protect vacant AC Connector – M.



AC End Cable-M/F

Consist of an AC Connector – M or F and a cable, to connect the microinverter branch to the distribution box.



AC Extension Cable

Consist of an AC Connector-M, an AC Connector-F and an AC cable, to connect the microinverters when the distance between the microinverters exceeds the original cable length.



DC Extension Cable

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

Technical Specifications

Model	AC Connector - F		AC Connector - M
Main Parameter			
Pin number	2P+PE		
Rated current	25 A		
Rated voltage	250 V AC (TUV), 250/350 V AC (CSA)		
Contact resistance	≤1 mΩ		
Power frequency withstand voltage	4000 V AC		
Over voltage category	III		
Connection Parameter			
Applicable cable specification	14/12 AWG		
Applicable cable outer diameter	10 mm to 13 mm		
Locking system	Bayonet		
Connector gender	Female		Male
Wiring connection	Screw type		
Mechanical Data			
Ambient temperature range	-40℃ to +85℃		
Dimensions (L × W × H mm)	85.5 × 35 × 35		
Protection rating	IP68		
Flame resistance degree	UL 94-V0		
Compliance			
Product standard	EN61535:2012 PPP 59015A:2013 UL 6703A		
RoHS compliant	Yes		

Model	AC End Cable-M/F		AC Extension Cable
Cable			
Cable type	12 AWG		
Rated voltage	600 V		
Cable length	2/5 m	2/3 m	
Ambient temperature range	-40°C to +90°C		
Product standard	UL 44, UL 1277, UL 1581		
AC Connector			
Type	AC connector - M/F	AC connector - M and F	

Model		DC Extension Cable	
Cable			
Cable type	PV1-F 1X4		
Rated current	20 A		
Rated voltage	Max.1800 V DC		
Cable length	1 m		
Ambient temperature range	-40°C to +90°C		
Product standard	2 PFG 1169/08.2007		
DC Connector			
Manufacturer	Betteri		Staubli
Type	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/CTS0002-2012
RoHS compliant	Yes		

Cable Accessories for Microinverter of HM-NT/HMS Series



AC Trunk Cable, 12/10 AWG Cable

AC Trunk Cable is used to connect the microinverter to distribution box.
The Trunk Connector on the AC Trunk Cable is evenly distributed at intervals, Hoymiles provides AC Trunk Cable with different AC Trunk Connector spacing.



AC Trunk Port Cap

Used to protect vacant AC Trunk Port.



AC Trunk Connector

The AC Sub Connector of the microinverter can be inserted into the port of the AC Trunk Connector.
Plug and play connectors speed up and simplify installation.



AC Trunk End Cap

Used to protect the cable port of AC Trunk Connector at the end of the AC branch.



AC Trunk Port Disconnect Tool

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



AC Trunk Connector Unlock Tool

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



DC Extension Cable

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

Technical Specifications

AC Trunk Cable		
Main Parameters		
Cable type	10 AWG	12 AWG
Rated voltage	600 V	
Cable outer diameter	12.5±0.40 mm	11.1±0.30 mm
Ambient temperature range	-40°C to +90°C	
AC Trunk Connector spacing	4.2 m/2 m	1 m
Number of AC Trunk Connectors per 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 1277, UL 1581	
RoHS compliant	Yes	

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	III
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 × W × 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 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 1169/08.2007
DC Connector			
Manufacturer	Betteri		Staubli
Type	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	IEC 62852(ed.1), EN 62852:2015		EN 62852 UL 6703 2PFG2330 CNCA/CTS0002-2012
RoHS compliant			Yes



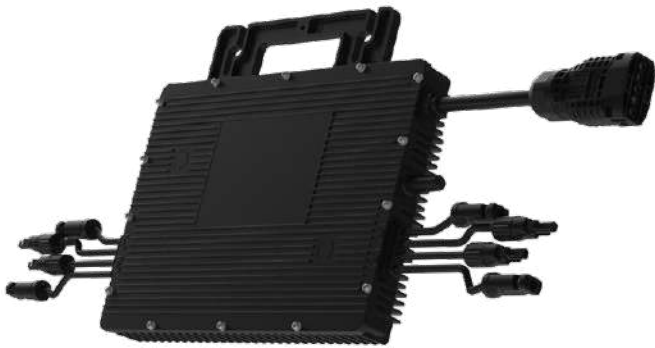
Three-phase Microinverter

HMT-1600-4T-208-NA
HMT-1800-4T-208-NA
HMT-2000-4T-208-NA

Hoymiles new generation microinverter HMT-2000-4T-208-NA series is designed to accommodate the high-powered PV modules, with maximum output power up to 2000 VA and maximum DC input current up to 16 A.

The innovative 4-input design enables faster installation and lower cost, and makes HMT-2000-4T-208-NA series a very cost-effective choice.

The new Sub-1G wireless solution enables more stable communication with Hoymiles gateway DTU.



✓ Three-phase output, more suitable for commercial and industrial applications

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

✓ Designed for North American grids with a three-phase Delta network.

✓ 4-in-1 design enables faster installation 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	HMT-1600-4T-208-NA	HMT-1800-4T-208-NA	HMT-2000-4T-208-NA
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		
Minimum/Maximum start-up 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	120/208, 3Φ/PE/N(Neutral optional)		
Peak output power(VA)	1600	1800	2000
Maximum continuous output power(VA)	1440	1728	1918
Maximum continuous output current(A)	4	4.8	5.33
Nominal output voltage(V)	120/208		
Nominal output voltage range(V) ¹	183-228		
Nominal frequency/range(Hz) ¹	60/55-65		
Power factor (adjustable)	>0.99 default 0.85 leading...0.85 lagging		
Total harmonic distortion	< 3%		
Maximum units per 12 AWG branch ²	4	3	3
Maximum units per 10 AWG branch ²	6	5	4
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 × H × D [mm])	326 × 222 × 40.6		
Weight (kg)	5.8		
Enclosure rating	Outdoor-IP67		
Cooling	Natural convection-No fans		
Features			
Communication	Sub-1G		
Topology	Galvanically Isolated HF Transformer		
Monitoring	S-Miles Cloud ³		
Compliance	UL 1741, IEEE 1547, UL 1741 SB, CSA C22.2 No. 107.1-16 FCC 15B, FCC 15C		
PV Rapid Shutdown	Conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218 Rapid Shutdown of PV Systems.		

*1 Nominal voltage/frequency range can vary depending on local requirements.

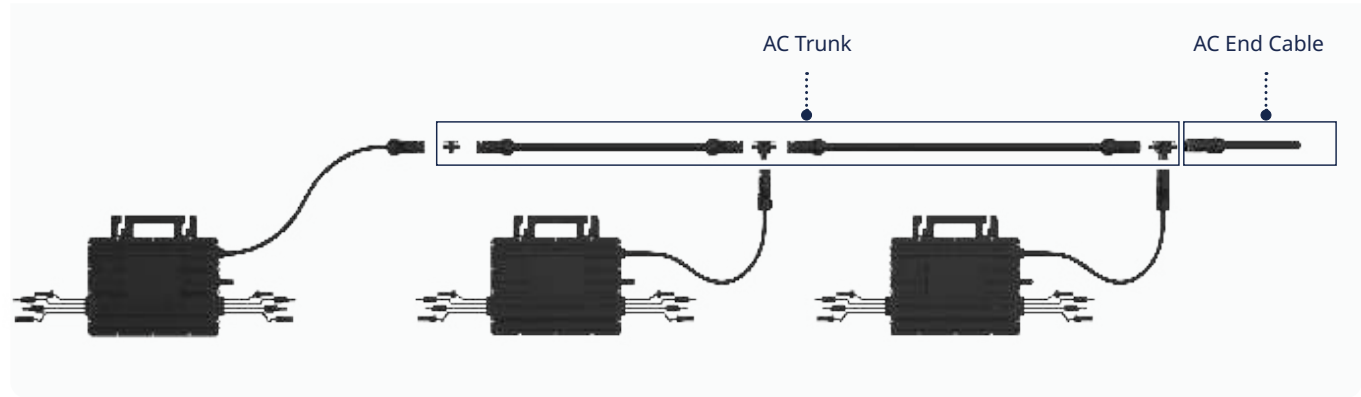
*2 Refer to local requirements for exact number of microinverters per branch.

*3 Hoymiles Monitoring System

Cable Accessories for Microinverter of HMT Series

| Simplify Your Installation with Easy, Flexible, and Reliable Cable System

The Flex-T5 Cable System is a revolutionary cabling solution designed for HMT series microinverters. Its user-friendly plug-and-play design makes the installation easier, faster, and more reliable. The Flex-T5 Cable System also features high flexibility, allowing users to mix and match Flex-T5 Connection Cables of different sizes or lengths to achieve their desired wiring configuration at the lowest cost.



Time-saving: Plug-and-play design eliminates the need for complex wiring, cutting installation time by 70%.



Cost-effective: The microinverter's AC output shares the same design as all connectors in the AC Trunk, enhancing flexibility while cutting costs.



Flexibility: Provide great flexibility for AC Trunk design that caters to the specific requirements of your PV system.



Reliability: Reconfigured wiring layout reduces heat production, ensuring a secure and stable connection.

Flex-T5 Connection Cable

Makes a customized AC Trunk by utilizing Flex-T5 Trunk Connectors and Flex-T5 Extension Connectors.



Flex-T5 Trunk Connector

Used to connect the microinverter's AC output to the AC Trunk, and to join together multiple Flex-T5 Connection Cables to create the AC Trunk.



Flex-T5 Extension Connector

Used to connect the first microinverter in the AC Trunk, to extend cable runs between microinverters when the distance exceeds the standard Flex-T5 Connection Cable length, and to create a cost-effective single-microinverter system.



Flex-T5 Cable Terminal Connector

Used to form the AC cable into an AC End Cable, which completes the connection between the end of the AC Trunk and the distribution box.



Flex-T5 Disconnect Tool

A versatile tool that can be used to take apart connectors, tighten nuts, and loosen nuts.



Technical Specifications

Connector System Parameter	
Compatible microinverter	HMT series
Pin number	3P + N [*] + PE
Voltage rating	500 V
Current rating	40 A
Max. supported conductor size	10 AWG
Max. supported cable outer diameter	0.69" (17.5 mm)
Ambient temperature range	-40°F to +185°F (-40°C to +85°C)
Protection rating	IP 68
Flame resistance degree	UL94-V0
Compliance	RoHS, UV Resistant
Product standard	UL6703
Cable Parameter	
Cable type	TC-ER
Voltage rating	600 V
Conductor size	12 / 10 AWG
Flame test rating	VTFT
Ambient temperature range	-40°F to +185°F (-40°C to +85°C)
Compliance	RoHS, UV Resistant
Product standard	UL44, UL1277, UL1581

* : The Flex-T5 Connection Cable is five-core. In Delta (Δ) Configuration where no N connection is required, you can create the AC End Cable using a four-core cable.

Ordering Options

Name	New Model (Previous Model)*	Number per Box	Box Dimensions
Flex-T5 Trunk Connector	T5-TC (HMT Trunk Connector-1PCS)	160 PCS	19.49" × 11.42" × 10.04" (495 mm × 290 mm × 255 mm)
Flex-T5 Extension Connector	T5-EC (HMT Extension Connector-1PCS)	300 PCS	19.49" × 11.42" × 10.04" (495 mm × 290 mm × 255 mm)
Flex-T5 Disconnection Tool	T5-DT (HMT Disconnect Tool-1PCS)	320 PCS	19.49" × 11.42" × 10.04" (495 mm × 290 mm × 255 mm)
Flex-T5 Cable Terminal Connector	T5-CTC-NA1210C (HMT Cable Terminal Connector)	110 PCS	19.49" × 11.42" × 10.04" (495 mm × 290 mm × 255 mm)

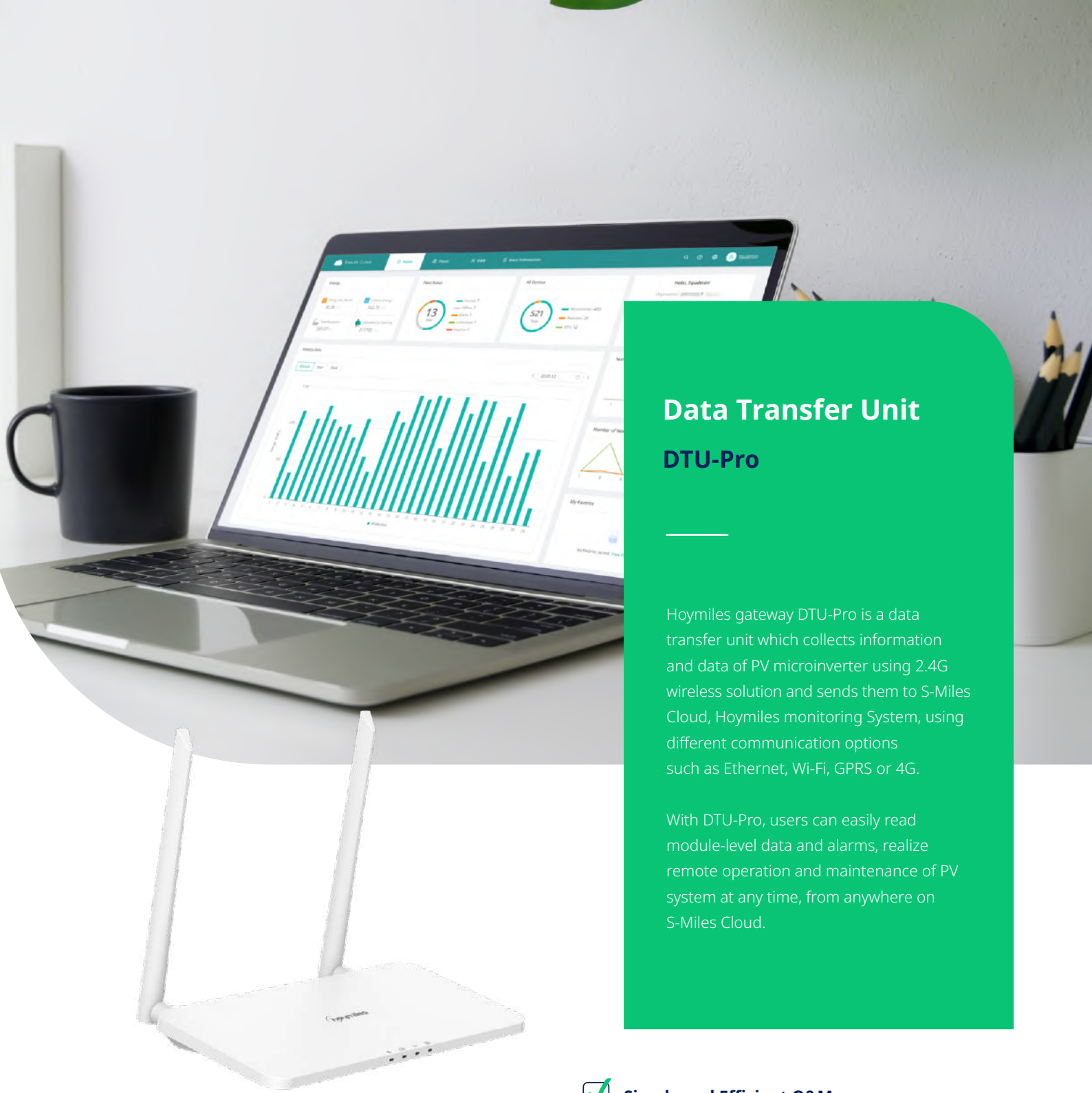
Connection Cable New Model (Previous Model)*	Conductors Cross Sectional Area	Rated Current **	Cable Length Between Connectors ***	Minimum Bending Radius	Number per Box	Box Dimensions
T5-CC-NA12-230 (HMT Connection Cable-NA12-230)	5 × 12 AWG	20 A	7.5 ft. (2.3 m)	2.8" (7 cm)	TBD	13.58" × 13.58" × 14.76" (345 mm × 345 mm × 375 mm)
T5-CC-NA12-460 (HMT Connection Cable-NA12-460)	5 × 12 AWG	20 A	15.1 ft. (4.6 m)	2.8" (7 cm)	TBD	13.58" × 13.58" × 14.76" (345 mm × 345 mm × 375 mm)
T5-CC-NA10-230 (HMT Connection Cable-NA10-230)	5 × 10 AWG	30 A	7.5 ft. (2.3 m)	3.5" (9 cm)	TBD	13.58" × 13.58" × 14.76" (345 mm × 345 mm × 375 mm)
T5-CC-NA10-460 (HMT Connection Cable-NA10-460)	5 × 10 AWG	30 A	15.1 ft. (4.6 m)	3.5" (9 cm)	TBD	13.58" × 13.58" × 14.76" (345 mm × 345 mm × 375 mm)

* : Hoymiles has renamed the accessories listed above, and that's the only change we've made. Please be assured that everything else remains the same.

** : Comply with local standards when designing and installing cables.

***: Cable length can be customized. Contact Hoymiles sales for more details.

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Data Transfer Unit DTU-Pro

Hoymiles gateway DTU-Pro is a data transfer unit which collects information and data of PV microinverter using 2.4G wireless solution and sends them to S-Miles Cloud, Hoymiles monitoring System, using different communication options such as Ethernet, Wi-Fi, GPRS or 4G.

With DTU-Pro, users can easily read module-level data and alarms, realize remote operation and maintenance of PV system at any time, from anywhere on S-Miles Cloud.

✓ Reliable and Flexible

- Stable communication with HM, MI series of microinverter
- More communication options with S-Miles Cloud, using Ethernet, Wi-Fi, GPRS or 4G
- Support of RS485, Ethernet to communicate with peripherals

✓ 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

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

Technical Specifications

Model	DTU-Pro (Wi-Fi Version)		DTU-Pro (4G Version)
Communication to Microinverter			
Signal	2.4GHz Proprietary RF (Nordic)		
Maximum distance (open space)	200 m		
Monitoring data limit from solar panels	99 ¹		
Communication to S-Miles Cloud			
Ethernet	RJ45 × 1, 100Mbps		
Wireless ²	Wi-Fi: 802.11b/g/n	4G: TDD-LTE, FDD-LTE 3G: SCDMA 2G: GSM/GPRS	
Sample rate	Per 15 minutes		
Communication to Peripherals			
RS485	COM × 1, 9600bps, Modbus-RTU		
Ethernet	RJ45 × 1, Modbus-TCP		
DRM (For AU/NZ only)	RJ45 × 1, DRM0/5/6/7/8		
Interaction			
LED	LED Indicator × 4 – RUN, Cloud, MI, ALM		
APP	S-Miles Toolkit		
Power Supply (Adapter)			
Type	External adapter		
Adapter input voltage/frequency	100 to 240 V AC / 50 or 60 Hz		
Adapter output voltage/current	5V/2A		
Power consumption	Typ. 1.5W / Max. 3.0W	Typ. 2.5W / Max. 5.0W	
Mechanical Data			
Ambient temperature (°C)	-20 to 55		
Dimensions (W × H × D mm)	200 × 101 × 29 (without antennas)		
Weight (kg)	0.20		
Installation method	Wall mounting / Desktop mounting		
Environmental rating	Indoor-IP20		
Compliance			
Certificates	CE, FCC, IC, RCM, Anatel		
Microinverter Compatibility			
Microinverter model	HM series, MI series		

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

*2 Extended antenna is recommended if the DTU is installed inside a metal box or under a metal/concrete roof.



Data Transfer Unit DTU-Pro-S

Hoymiles gateway DTU-Pro-S is a data transfer unit which collects information and data of PV microinverter using Sub-1G wireless solution and sends them to S-Miles Cloud, Hoymiles Monitoring Platform, using different communication options such as Ethernet, Wi-Fi or 4G.

With DTU-Pro-S, users can easily read module-level data and alarm, realize remote operation and maintenance of PV system at any time, from anywhere on S-Miles Cloud.



Reliable and Flexible

- 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



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

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

Technical Specifications

Model	DTU-Pro-S (Wi-Fi Version)	DTU-Pro-S (4G Version)
Communication to Microinverter		
Signal	Sub-1G	
Maximum distance (open space)	400 m	
Monitoring data limit from solar panels ¹	99	
Communication to S-Miles Cloud		
Ethernet	RJ45 × 1, 100Mbps	
Wireless ²	Wi-Fi: 802.11b/g/n	4G: TDD-LTE, FDD-LTE 3G: SCDMA 2G: GSM/GPRS
Sample rate	Per 15 minutes	
Communication to Peripherals		
RS485	COM × 1, 9600bps, Modbus-RTU	
Ethernet	RJ45 × 1, Modbus-TCP	
DRM (For AU/NZ only)	RJ45 × 1, DRM0/5/6/7/8	
Interaction		
LED	LED Indicator × 4 – RUN, Cloud, MI, ALM	
APP	S-Miles Toolkit	
Power Supply (Adapter)		
Type	External adapter	
Adapter input voltage/frequency	100 to 240 V AC/50 or 60 Hz	
Adapter output voltage/current	5 V/2 A	
Power consumption	Typ. 1.5 W / Max. 3.0 W	Typ. 2.5 W / Max. 5.0 W
Mechanical Data		
Ambient temperature (°C)	-20 to +55	
Dimensions (W × H × D mm)	200 × 101 × 29 (without antennas)	
Weight (kg)	0.20	
Installation method	Wall mounting / Desktop mounting	
Environmental rating	Indoor-IP20	
Compliance		
Certificates	CE, FCC, IC, RCM, Anatel	
Microinverter Compatibility		
Microinverter model	HMS series, HMT series	

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

*2 Extended antenna is recommended if the DTU is installed inside a metal box or under a metal/concrete roof.



Combiner Box

Combiner Box HMS-C

Compatible with HMS series microinverters

The Hoymiles Combiner Box acts as a central unit, enhancing the efficiency of installing residential power plants by consolidating power distribution and data transmission into one convenient hub.

This Combiner Box includes the DTU and smart meter, enabling functions such as data collection, data transmission, real-time monitoring, and Export Power Limit.

Additionally, it integrates the Eaton BR series load center, capable of handling up to five 2-Pole input circuits to manage more loads and higher input currents.



Convenient

- Simple installation and efficient distribution of electrical power across various circuits
- Supports up to five 2-Pole branch circuits for 240 VAC plug-in breakers (not included)
- Supports bottom conduit entry



Smart

- Integrates the DTU and smart meter for communication and management
- Supports 4G and Ethernet connectivity
- Provides production metering and consumption monitoring



Reliable

- NEMA type 3R enclosure, UV resistance
- 5-year limited warranty
- UL1741 listed

Technical Specifications

Model	Description
Combiner Box HMS-C	• Integrates a communication module that collects microinverter data via Sub-1G (compatible with HMS series microinverters) • Supports transmitting microinverter data to the S-Miles Cloud via 4G and Ethernet • Integrates a smart meter for revenue-grade PV production metering with accuracy at ±0.5% (ANSI C12.20) and grid metering with accuracy at ±1.0% (ANSI C12.1)
Accessories	
Communication Module	Includes a Power Supply, a DTU-Plus, and a meter, collectively gathering and transmitting data, enabling users to monitor system performance via PC, Smartphone, or Tablet and making remote O&M possible
Load Center	Eaton load center, 125 A capacity, with one circuit breaker assigned for powering the communication module, and the other five circuit breakers (not included) designated for branch circuits
Communication Module Breaker	Circuit breaker, 2-Pole, 10 A
Neutral Bar	Eaton GBK5
Ground Bar	Eaton GBK10
Production CT	Pre-wired revenue-grade solid core CT, accurate up to 0.5%
Grid CT	Two consumption metering clamp CTs, shipped with the box, accurate up to 1.0%
Electrical Specifications	
Rating	110 A
System voltage	120/240 VAC, 60 Hz
Eaton BR series busbar rating	125 A
Maximum continuous current rating (input from PV)	88 A
Branch circuits (solar)	Supports up to five 2-Pole Eaton BR series distributed generation (DG) breakers (not included), such as BR210, BR215, BR220, and BR230
Maximum total branch circuit breaker rating (input)	110 A
Communication module breaker	10 A (Eaton BR series)
Wire size	20 A to 50 A breaker inputs: 14 to 4 AWG conductors
	Main lug combined output: 10 to 2/0 AWG conductors
	Neutral and Ground: 14 to 6 AWG conductors
	Always follow local code requirements for conductor sizing
Mechanical Data	
Dimensions (W × H × D)	19.67 × 15.75 × 7.87 inch. (500 × 400 × 200 mm)
Weight	21.2 lbs. (9.6 kg)
Ambient temperature range	-13°F to 122°F (-25°C to 50°C)
Cooling	Natural convection
Enclosure rating	Outdoor, IP65/NEMA type 3R, Polycarbonate Construction
Altitude	Up to 6,562 feet (2, 000 meters)
Internet Connection Options	
Ethernet	802.3, 10 M / 100 M Adaptive Ethernet, Cat 5E (or Cat 6) UTP Ethernet cable (not included), for connecting to the S-Miles Cloud via the internet
Mobile connect	4G LTE, for connecting to the S-Miles Cloud via the internet
RS485	Support for data transmission using Modbus protocol
Access point	For connection between the DTU and a mobile device running the S-Miles Cloud App
Metering ports	Up to two Grid CTs, and two Production CTs
Compliance	
Combiner Box	UL 1741, CAN/CSA C22.2 No. 107.1, FCC CFR 47 part 15 B, ICES-003 Issue 7
Power Supply	UL 508, UL 62368-1
Meter	UL 61010-1, UL61010-2-030, FCC CFR 47 part 15 B, CSA-C22.2 NO. 61010-1, CSA-C22.2 # 61010-2-030, ICES-003 Issue 7
Compatibility	
Microinverter	HMS Series Microinverters



Single-phase Hybrid Inverter

HYS-3.8LV-USG1
HYS-4.8LV-USG1
HYS-6.0LV-USG1
HYS-7.6LV-USG1
HYS-9.6LV-USG1
HYS-11.5LV-USG1

The HYS-LV-USG1 Series is a high-performance single-phase hybrid inverter with excellent reliability, including power classes ranging from 3.8 kW to 11.5 kW. The intelligent EMS function supports self-consumption mode, economical mode, and backup mode for multi-scenario applications. Monitoring management through S-Miles Cloud allows users to remotely diagnose and track individual system's performance over time, maximizing the total solar power production and battery utilization.

- ✓ Max. Efficiency 97.6%, CEC Efficiency 97.0%
- ✓ Double MPPT tracker, up to 32 A MPPT current
- ✓ DC/AC ratio up to 150%
- ✓ Ultralight for easy installation and space-saving

- ✓ Support 120/240 V backup power without external autotransformer
- ✓ Seamless backup power for whole home or critical loads
- ✓ Built-in dry contact flexibly set to earth fault alarm, load control, or generator control
- ✓ Integrated arc fault protection and rapid shutdown function

Technical Specifications

Model	HYS-3.8LV-USG1	HYS-4.8LV-USG1	HYS-6.0LV-USG1	HYS-7.6LV-USG1	HYS-9.6LV-USG1	HYS-11.5LV-USG1
Battery						
Battery type	Li-ion/Lead-acid					
Battery voltage range (V)	40-60					
Max. charge/discharge current (A)	80/80	100/100	100/100	160/160	200/200	200/200
Max. charge/discharge power (W)	3840/3840	4800/4800	4800/4800	7600/7600	9600/9600	9600/9600
Charging strategy for Li-ion battery	Self-adaption to BMS					
Charging curve	3 Stages/Equalization					
External temperature sensor	Optional					
Communication	CAN					
PV Input						
Recommended max. PV power (W)	5760	7200	9000	11520	14400	14400
Max. input voltage (V)	550					
Rated voltage (V)	380					
Start-up voltage (V)	150					
MPPT voltage range (V)	125-500					
Max. input current (A)	16/16	16/16	16/16	32/32	32/32	32/32
Max. short circuit current (A)	20/20	20/20	20/20	40/40	40/40	40/40
MPPT number/Max. input strings number	2/2	2/2	2/2	2/4	2/4	2/4
AC Input and Output (On-grid)						
Rated output power (W)	3840	4800	6000	7680	9600	11520
Max. output apparent power (VA)	3840	4800	6000	7680	9600	11520
Max. input power (W)	7680	9600	9600	15360	19200	19200
Rated AC output voltage/Range (V)	240, 211-264/208, 183-229 ⁽¹⁾					
Rated grid frequency (Hz)	60					
Max. output current (A)	16	20	25	32	40	48
Max. input current (A)	32	40	40	64	80	80
Power factor	>0.99 (0.8 leading ... 0.8 lagging)					
THDi (@rated output)	<3%					
AC Output (Off-grid)						
Rated output power (W)	3840	4800	4800	7680	9600	9600
Max. output apparent power (VA) ⁽²⁾	7680, 10s	9600, 10s	9600, 10s	15360, 10s	19200, 10s	19200, 10s
Back-up switch time (ms)	<40					
Rated output voltage (V)	120/240 (split phase), 120/208 ⁽¹⁾					
Rated output frequency (Hz)	60					
Max. continuous output current (A)	16	20	20	32	40	40
THDv (@linear load)	<3%					
Efficiency						
MPPT efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Max. efficiency	97.6%	97.6%	97.6%	97.6%	97.6%	97.6%
CEC efficiency	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%
Max. battery discharge to AC efficiency	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
Protection						
Anti-islanding protection	Integrated					
PV arc fault detection	Integrated					
PV string input reverse polarity protection	Integrated					
Compliant MLRSD products	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						
Dimensions (W × H × D)	19.8 × 24.2 × 7.95 inch (502 × 615 × 202 mm)			19.8 × 29.1 × 7.95 inch (502 × 740 × 202 mm)		
Weight	68.3 lbs (31 kg)			90.4 lbs (41 kg)		
Mounting	Wall mounting					
Operating temperature	-13°F to +149°F (>113°F, derating)/-25°C to +65°C (>45°C, derating)					
Relative humidity	0-95%, no condensing					
Cooling	Natural convection					
Topology (Solar/Battery)	Transformerless/High-frequency isolation					
Altitude	≤6562 ft (2000 m)					
Protection degree	Type 4X					
Noise (dB)	<40					
User interface	LED, App					
Digital input/output	1 × DI, 2 × DO					
Max. parallel	10					
Communication	RS485, optional: Wi-Fi/Ethernet/4G ⁽³⁾					
Warranty	10 Years					
Certifications and Standards						
Grid connection standard	IEEE 1547-2018, IEEE 1547.1-2020, SRD2.0					
Safety/EMC standard	UL 1741, CSA C22.2 No.107.1, UL 1741 CRD, UL 1741 SB, FCC Part 15 Class B					
AFCI	UL 1699B					
Software approval	UL 1998					

(1) For 240 V, the grid profile is US_IEEE1547; for 208 V, the grid profile is IEEE1547_208V.
(2) Can be achieved only if PV and battery power are sufficient.
(3) The DTS-Ethernet and DTS-4G solutions will be coming soon.



Single-phase AC-coupled Inverter

HAS-3.8LV-USG1
HAS-4.8LV-USG1
HAS-6.0LV-USG1
HAS-7.6LV-USG1
HAS-9.6LV-USG1
HAS-11.5LV-USG1

The HAS-LV-USG1 Series is for retrofit application, including power classes ranging from 3.8 kW to 11.5 kW. It can be installed with existing PV inverters, forming an AC-coupled system.

The intelligent EMS function supports self-consumption mode, economical mode, and backup mode for multi-scenario applications. Monitoring management through S-Miles Cloud allows users to remotely diagnose and track individual system's performance over time, maximizing the total battery utilization.

✓ Max. battery discharge to AC efficiency 95.0%

✓ Compatible with various 48 V low voltage batteries

✓ Ultralight for easy installation and space-saving

✓ Split-phase backup output w/o bulky autotransformer

✓ Seamless backup power for whole home or critical loads

✓ Smart energy storage system operating modes

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

✓ Remote monitoring through S-Miles Cloud

Technical Specifications

Model	HAS-3.8LV-USG1	HAS-4.8LV-USG1	HAS-6.0LV-USG1	HAS-7.6LV-USG1	HAS-9.6LV-USG1	HAS-11.5LV-USG1
Battery						
Battery type	Li-ion/Lead-acid					
Battery voltage range (V)	40-60					
Max. charge/discharge current (A)	80/80	100/100	100/100	160/160	200/200	200/200
Max. charge/discharge power (W)	3840/3840	4800/4800	4800/4800	7600/7600	9600/9600	9600/9600
Charging strategy for Li-ion battery	Self-adaption to BMS					
Charging curve	3 Stages/Equalization					
External temperature sensor	Optional					
Communication	CAN					
AC Input and Output (On-grid)						
Rated output power (W)	3840	4800	6000	7680	9600	11520
Max. output apparent power (VA)	3840	4800	6000	7680	9600	11520
Max. input power (W)	7680	9600	9600	15360	19200	19200
Rated AC output voltage/Range (V)	240, 211-264/208, 183-229 ⁽¹⁾					
Rated grid frequency (Hz)	60					
Max. output current (A)	16	20	25	32	40	48
Max. input current (A)	32	40	40	64	80	80
Power factor	>0.99 (0.8 leading ... 0.8 lagging)					
THDi (@rated output)	<3%					
AC Output (Off-grid)						
Rated output power (W)	3840	4800	4800	7680	9600	9600
Max. output apparent power (VA)	7680, 10s	9600, 10s	9600, 10s	15360, 10s	19200, 10s	19200, 10s
Back-up switch time (ms)	<40					
Rated output voltage (V)	120/240 (split phase), 120/208 ⁽¹⁾					
Rated output frequency (Hz)	60					
Max. continuous output current (A)	16	20	20	32	40	40
THDv (@linear load)	<3%					
Efficiency						
Max. battery discharge to AC efficiency	95.0%	95.0%	95.0%	95.0%	95.0%	95.0%
Protection						
Anti-islanding protection	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						
Dimensions (W × H × D)	19.8 × 24.2 × 7.95 inch (502 × 615 × 202 mm)			19.8 × 29.1 × 7.95 inch (502 × 740 × 202 mm)		
Weight	61.7 lbs (28 kg)			81.6 lbs (37 kg)		
Mounting	Wall mounting					
Operating temperature	-13°F to +149°F (>113°F, derating)/-25°C to +65°C (>45°C, derating)					
Relative humidity	0-95%, no condensing					
Cooling	Natural convection					
Topology (Battery)	High-frequency isolation					
Altitude	≤6562 ft (2000 m)					
Protection degree	Type 4X					
Noise (dB)	<40					
User interface	LED & App					
Digital input/output	1 × DI, 2 × DO					
Max. parallel	10					
Communication	RS485, optional: Wi-Fi/Ethernet/4G ⁽²⁾					
Warranty	10 Years					
Certifications and Standards						
Grid connection standard	IEEE 1547-2018, IEEE 1547.1-2020, SRD2.0					
Safety/EMC standard	UL 1741, CSA C22.2 No.107.1, UL 1741 CRD, UL 1741 SB, FCC Part 15 Class B					
Software approval	UL 1998					

(1) For 240 V, the grid profile is US_IEEE1547; for 208 V, the grid profile is IEEE1547_208V.
(2) The DTS-Ethernet and DTS-4G solutions will be coming soon.



Low Voltage Battery

LB-10D-USG2

The LB-10D-USG2 is a type of deep cycle high capacity LFP battery with improved safety, long lifespan, and optimized user experience.

It is designed with a NEMA 4X rating for more flexible and easier installation, with wall-mounted and floor-standing installation options.

It has superior performance with up to 10.24 kWh for a single unit and a maximum of 102.4 kWh in parallel.



Support wall-mounted or floor-standing installation



A maximum capacity of 102.4 kWh in parallel



NEMA 4X design suitable for indoor/outdoor installation

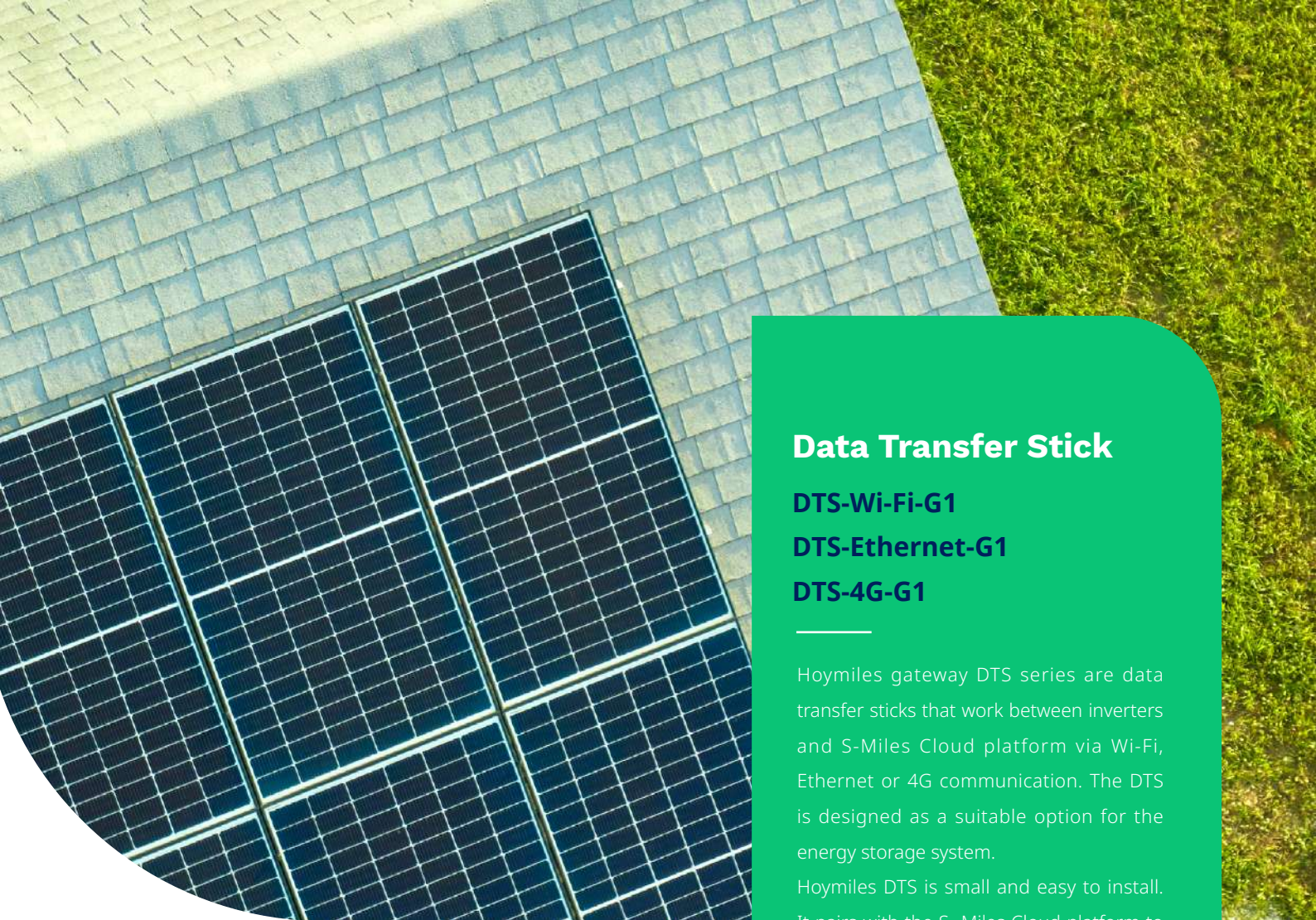


Quick connector design saves installation time

Technical Specifications

Model	LB-10D-USG2
System Data	
Battery type	LiFePO ₄
Rated capacity	200 Ah
Usable energy	10.24 kWh
Rated voltage	51.2 V
Voltage range	44.8 V-57.6 V
Rated charging current	0.5C, 100 A
Max. charging current	150 A, 10 mins
Rated charging power	5.12 kW
Max. charging/discharging power	7.68 kW/7.68 kW, 10 mins
Peak discharging current	200 A, 15s
Communication	CAN
Recommended depth of discharge (DOD)	90%
Max. parallel quantity	Max. 10 sets in parallel, 102.4 kWh ⁽¹⁾
Protection	
Overvoltage and undervoltage protection	Integrated
Overcurrent protection	Integrated
Overtemperature and undertemperature protection	Integrated
DC breaker	Integrated
General	
Dimensions (W × H × D)	21.85 × 36.54 × 8.27 inch (555 × 928 × 210 mm)
Weight	227 lbs (103 kg)
Charging temperature	32°F to 131°F (0°C to +55°C)
Discharging temperature	-4°F to 131°F (-20°C to +55°C)
Protection degree	NEMA 4X
Cooling	Natural convection
Altitude	≤6562 ft (2000 m)
Cycle life (77°F/25°C, 0.5C)	≥6000 Cycles
Certification	UN 38.3, CEC, UL 1973, UL 9540A, UL 9540
Warranty	10 Years

(1) For details, please refer to local laws and regulations.



Data Transfer Stick

DTS-Wi-Fi-G1

DTS-Ethernet-G1

DTS-4G-G1

Hoymiles gateway DTS series are data transfer sticks that work between inverters and S-Miles Cloud platform via Wi-Fi, Ethernet or 4G communication. The DTS is designed as a suitable option for the energy storage system.

Hoymiles DTS is small and easy to install. It pairs with the S- Miles Cloud platform to enable real-time system data or alarm monitoring and allows remote operation and maintenance of the storage energy system from anywhere.



Integrated to use, simply plug and play



Stable and reliable data transmission



IP65 protection



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

Technical Specifications



Model	DTS-Wi-Fi-G1
Communication	
Max. Inverter Supported	10
Sample Rate	5 minutes
Indicator	LED
Connection Interface	USB
Wireless Standard	802.11b/g/n
Frequency Range	2.412 GHz - 2.484 GHz
Configuration Method	App / Web
General	
Operating Voltage	DC 5 V
Power Consumption	≤ 5 W
Dimensions (W × H × D)	108 × 57 × 36 mm (4.3 × 2.2 × 1.4 inch)
Weight	60 g (0.13 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

Technical Specifications



Model	DTS-Ethernet-G1 ⁽¹⁾
Communication	
Max. Inverter Supported	10
Sample Rate	5 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 × H × 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

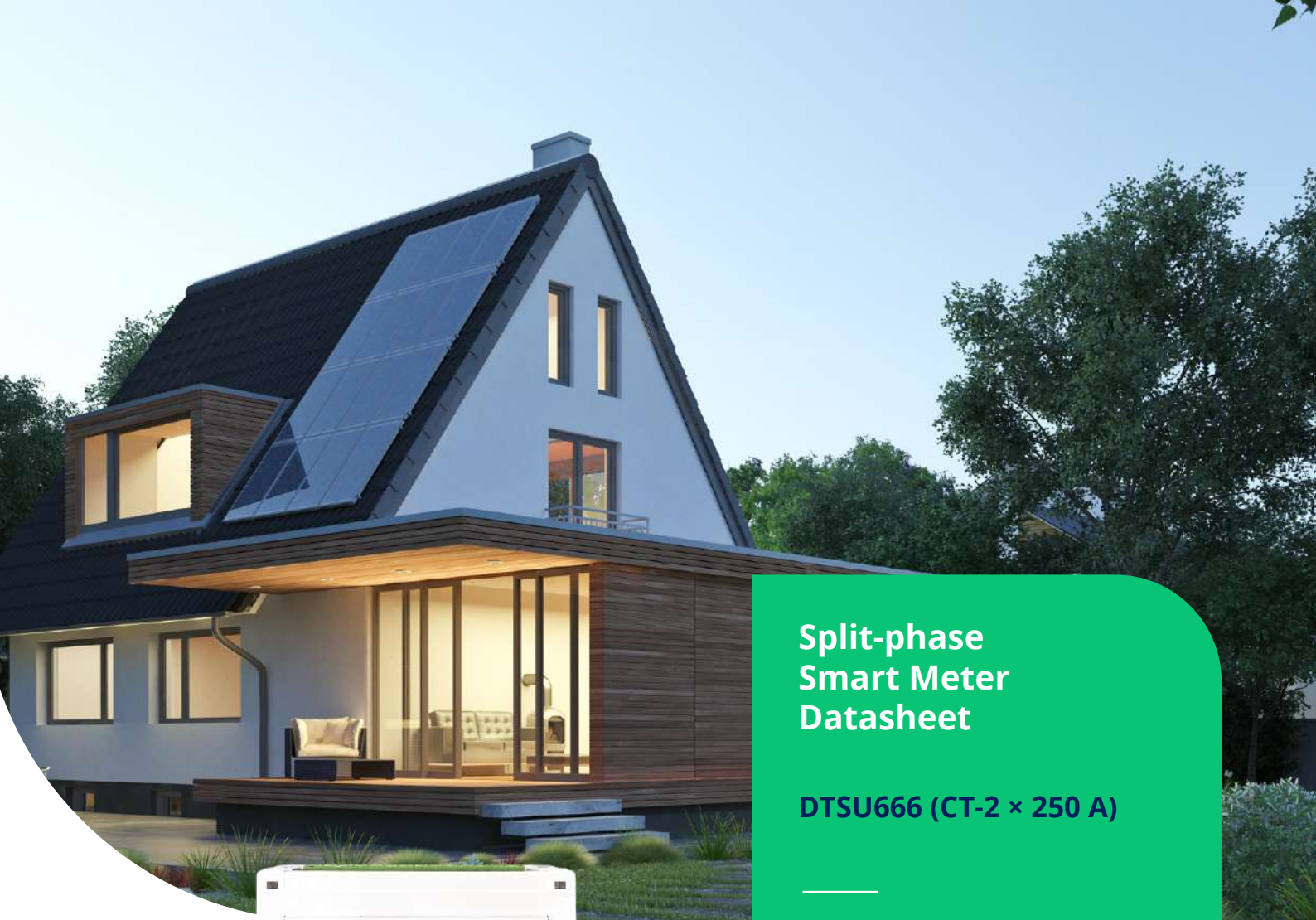
(1) The DTS-Ethernet solution will be coming soon.

Technical Specifications



Model	DTS-4G-G1 ⁽¹⁾
Communication	
Max. Inverter Supported	10
Sample Rate	5 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 × H × D)	108 × 57 × 36 mm (4.3 × 2.2 × 1.4 inch)
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

(1) The DTS-4G solution will be coming soon.



Split-phase Smart Meter Datasheet

DTSU666 (CT-2 × 250 A)

Split-phase smart meter with the external current transformer can be used to measure the PV power production, load consumption, or export power.

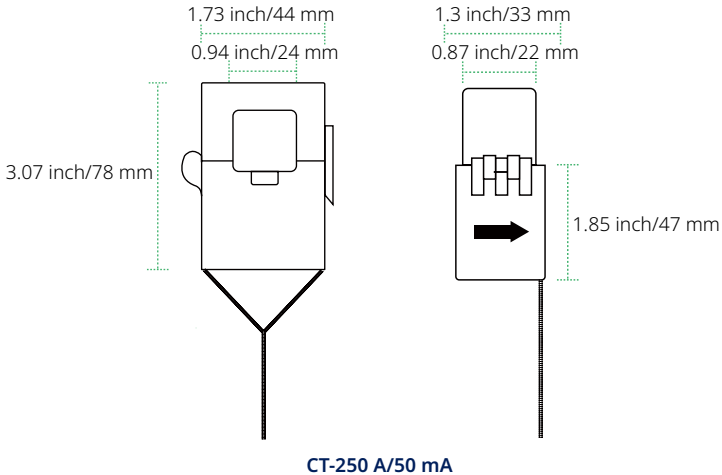


Technical Specifications

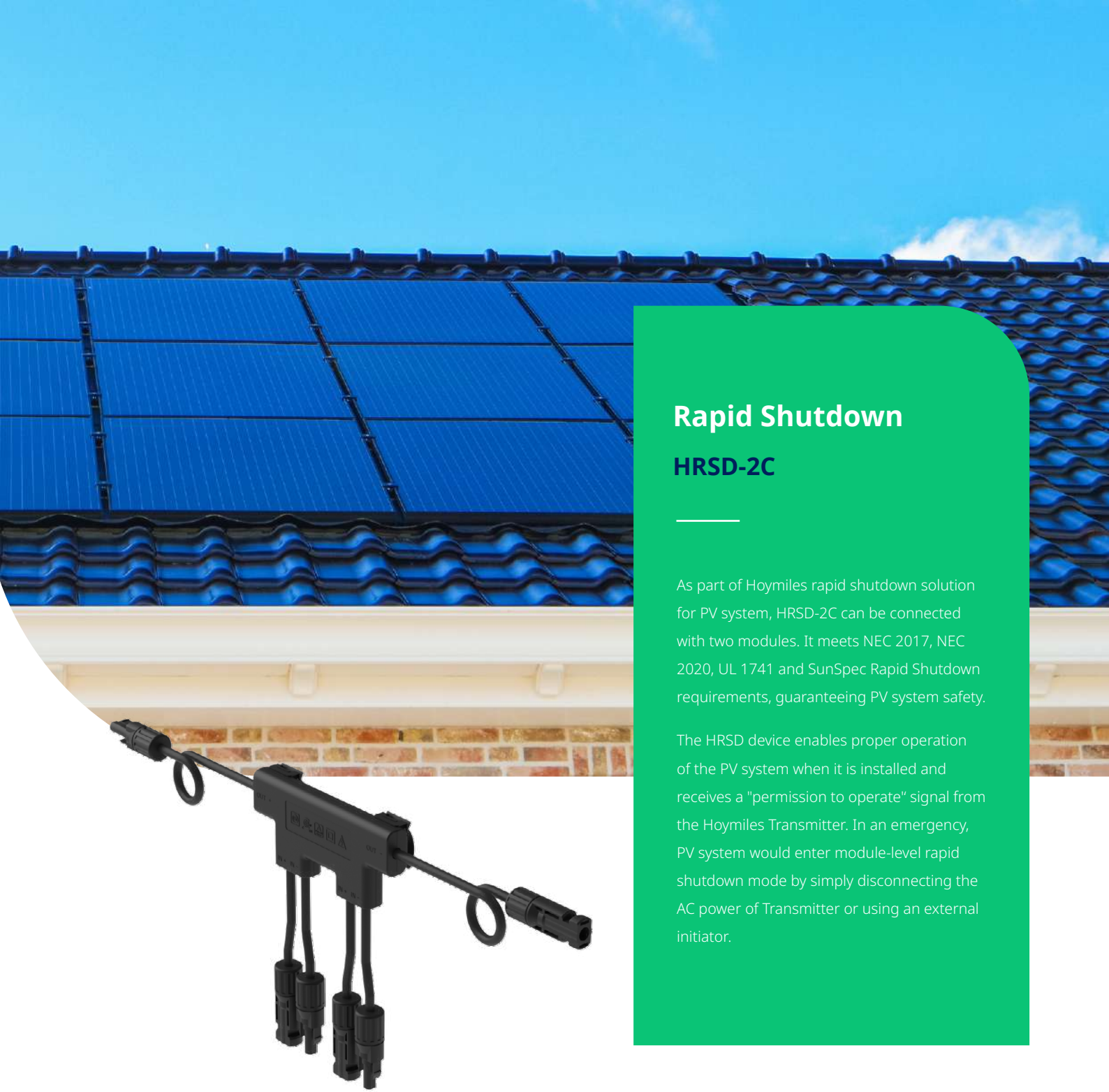
Model (Meter)	DTSU666 (CT-2 × 250 A)
Power Supply	
Grid type	1P3W
Input voltage (phase voltage)	96 Vac - 138 Vac
Power consumption	≤1.5 W
Measuring Range	
Phase voltage	96 Vac - 138 Vac
Current	0 - 250 A
Measuring Range	
0.01 $I_n \leq I < 0.05 I_n^{(1)}$	96 Vac - 138 Vac
0.05 $I_n \leq I \leq I_n^{(1)}$	±1.0%
Communication	
Interface	RS485
Communication protocol	Modbus-RTU
Mechanical Data	
Wiring type	Via-CT
0.05 $I_n \leq I \leq I_n^{(1)}$	±1.0%
Dimensions (W × H × D)	2.83 × 3.86 × 2.58 inch (72 × 98 × 65.5 mm)
Mounting type	DIN35 Rail
CT Data	
Thread	Single turn
Install	Buckle
Ambient temperature range	-13°F - 158°F (-25°C - 70°C)
Dimensions (W × H × D)	1.73 × 3.07 × 1.3 inch (44 × 78 × 33 mm)
Cable length	19 ft (6 m)

(1) Secondary rated current of the current transformer.

Unit: inch/mm



CT-250 A/50 mA



Rapid Shutdown

HRSD-2C

As part of Hoymiles rapid shutdown solution for PV system, HRSD-2C can be connected with two modules. It meets NEC 2017, NEC 2020, UL 1741 and SunSpec Rapid Shutdown requirements, guaranteeing PV system safety.

The HRSD device enables proper operation of the PV system when it is installed and receives a "permission to operate" signal from the Hoymiles Transmitter. In an emergency, PV system would enter module-level rapid shutdown mode by simply disconnecting the AC power of Transmitter or using an external initiator.

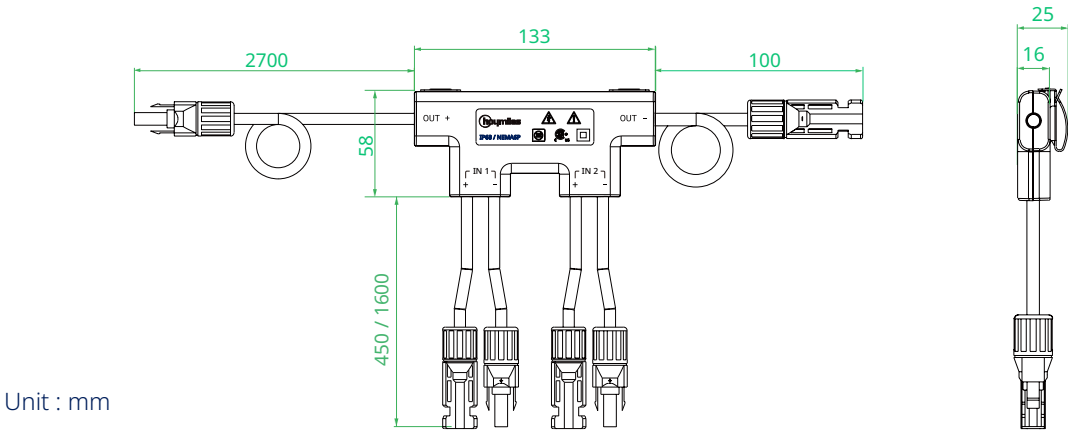
-  **Module-level Rapid Shutdown**
Meets SunSpec RSD, NEC 2017&NEC 2020 690.12 requirements
-  **Increased Reliability**
Uses Active Bypass to reduce heat generation in shade and other situations
-  **Better Temperature Uniformity**
Uses graphene heat spreader to improve heat dissipation

-  **Easy Installation**
Plug & play, no configuration required
-  **High Efficiency**
Lower power consumption and wider operating voltage range
-  **Reliable Communication**
Able to avoid crosstalk with special communication modulation technique

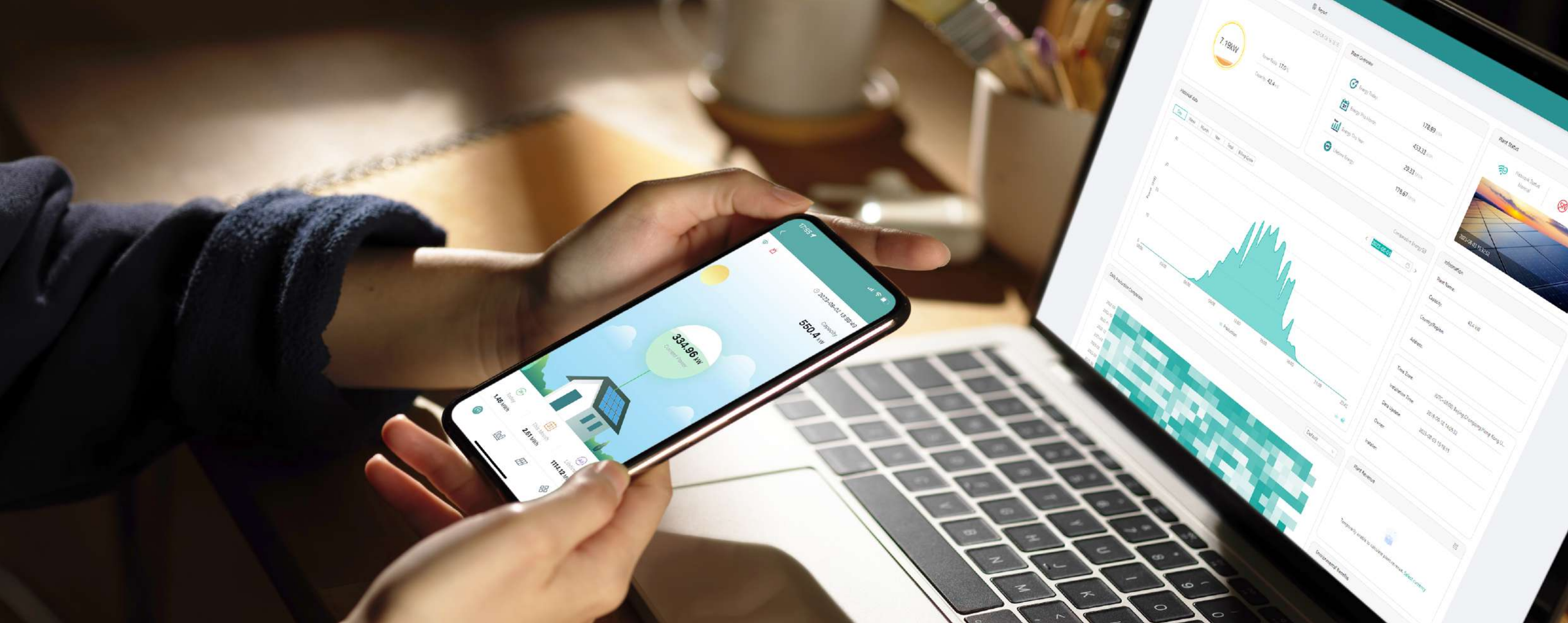
Technical Specifications

Model	HRSD-2C	HRSD-2C-B
Electrical Data		
Output voltage range	16-160 V	16-130 V
Input voltage range	8-80 V	8-65 V
Maximum current	15 A	20 A
Maximum short circuit current	25 A	
Maximum system voltage	1000 V / 1100 V (1500 V optional)	
Communication type	SunSpec PLC	
Shutdown output voltage	1 V	
Power consumption	200 mW	
Mechanical Data		
Input connectors	MC4 / MC4 EVO2, optional	
Input cable length ¹	0.45 m (1.48 ft.) / 1.6 m (5.23 ft.), optional	
Output connectors	MC4 / MC4 EVO2, optional	
Output cable length ²	2.7 m (+) / 0.1 m (-) 8.86 ft. (+) / 0.33 ft. (-)	
Dimensions	133 x 58 x 16 mm (5.24 x 2.28 x 0.63 inch)	
Environmental		
Operating temperature range	-40°C to +85°C (-40°F to +185°F)	
Outdoor rating	IP68 / NEMA6P	
Compliance		
Safety	UL1741, CSA C22.2 No. 330-17, IEC/EN 62109-1	
EMC	FCC Part15 Class B, ICES-003, IEC/EN 61000-6-1/-2/-3/-4	

*1: The former matches PV module output cables of 1.35 m (4.43 ft.) at minimum, and the latter matches those of 0.2 m (0.66 ft.) at minimum.
2: Fits PV module in portrait installation. Contact Hoymiles if horizontal installation is needed.



Unit : mm

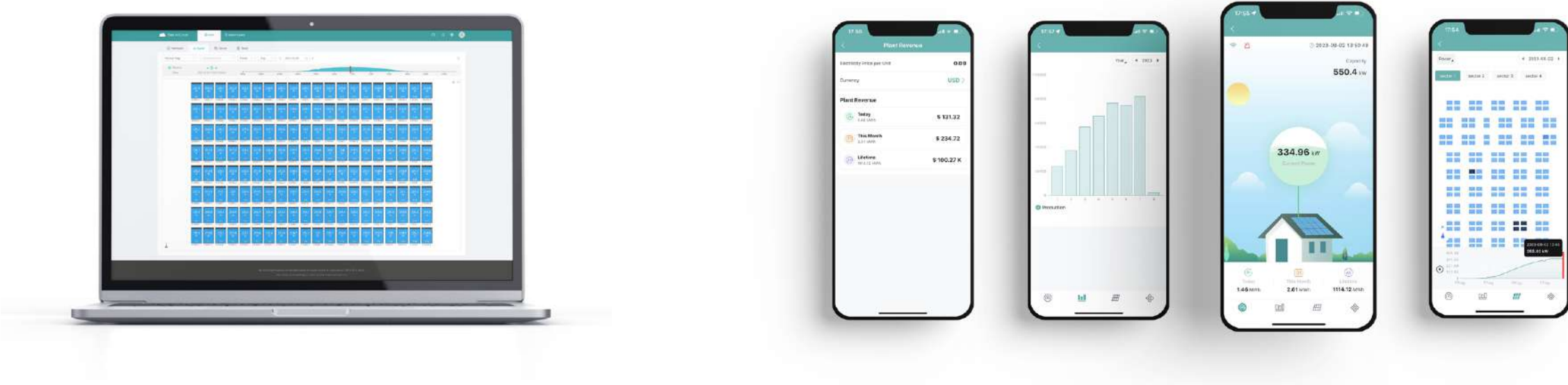


S-Miles Cloud

- Module level monitoring
- Individual MPPT
- Easy to operation and maintain the system

Available:

- ✓ Webpage
- ✓ APP- Android / IOS



94.38kW

Nova Scotia, Canada

Project Success

Residential

Capacity: 7.28kW

Location: Canada



Capacity: 31.5kW

Location: Mildenerger Estate, Halifax, Canada



Farm Project

Capacity: 281kW

Location: Central Missouri, US



Contact Details

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