Transmitter Datasheet

HT-G20-A101
HT-G20-A102
HT-G20-B202
HT-G20-C202

Description

The HT-G20 Series Transmitters are part of the Hoymiles Rapid Shutdown solution and work with HRSD for module-level rapid shutdown.

When the transmitter is powered on, it uses PLC technology to send a "permission to operate" signal to HRSD allowing the PV system to produce power.

In an emergency, the PV system can be shut down by turning off the transmitter's AC power or using an external switch.*

**For more details, see the user manual.*

Features

- Works with Hoymiles HRSD for quick module shutdown
- Complied with NEC 2017&NEC 2020 690.12 requirements
- Quickly shuts down by powring off the transmitter or using an external initiation
- Available with single or dual cores
- Advanced crosstalk prevention solution, prevents signal interference effectively

Technical Specifications

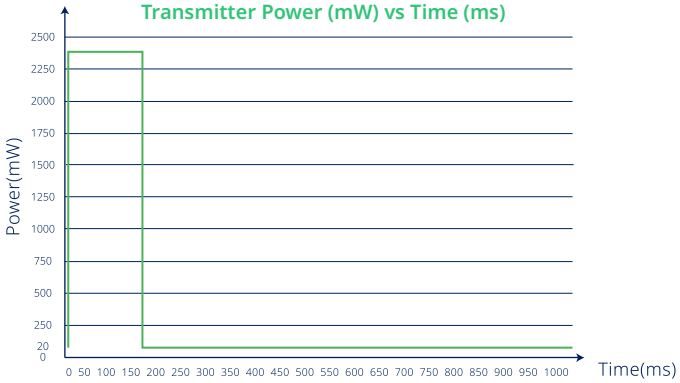
Model	HT-G20-A102			HT-G20-B102			HT-G20-B202			HT-G20-C202		
Electrical												
Transmitter input voltage	12 V DC (+/-2%)											
Transmitter input current	0.06 A											
Communication												
Communication type	PLC											
Max. cable length between inverter input (+) and input (-)	800 m (2624.67 ft.)											
Core												
Number of Core connected	1			1			2			2		
Max. allowable current per Core	75 A			150 A			150 A			250 A		
DC cable diameter	Φ 6 mm (0.24")	Φ 6.45 mm (0.25")	Φ 7 mm (0.28")	Φ 6 mm (0.24")	Φ 6.45 mm (0.25")	Φ 7 mm (0.28")	Φ 6 mm (0.24")	Φ 6.45 mm (0.25")	Φ 7 mm (0.28")	Φ 6 mm (0.24")	Φ 6.45 mm (0.25")	Φ 7 mm (0.28")
Max. number of strings per Core*	5	4	3	15	12	10	15	12	10	20	18	16
Max. number of HRSD-1Cs per Core**	150	120	90	450	360	300	450	360	300	600	540	480
Max. number of HRSD-2Cs per Core**	75	60	45	225	180	150	225	180	150	300	270	240
Mechanical												
Dimensions	93 × 36.5 × 53 mm (3.66" × 1.44" × 2.09")											
Mounting type	DIN35 rail											
Environmental												
Operating temperature range	-40°C to +85°C (-40°F to +185°F)											
Outdoor rating	IP10 / NEMA1											
Compliance												
Safety	UL3741, UL1741, CSA C22.2 No. 330-17											
EMC	FCC Part 15B, ICES-003											

* The maximum number of strings per Core is determined by the DC cable current and diameter. The total cable current should not exceed the Core's maximum allowable current, and the total cable diameter should not exceed the Core's diameter.

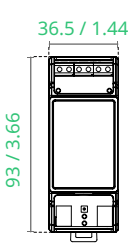
** Max. number of HRSDs per Core = Max. number of strings per Core × number of PV modules per string (In the table we have assumed each string has 30 PV modules.)

When installed inside an inverter, the HT-G20 needs to be powered with the following power curve at least.

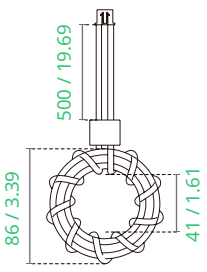
- Voltage: 12 V DC (+/-2%)
- Power standby: 0.2 W
- Duty cycle: 16%
- Max. power: 3 W



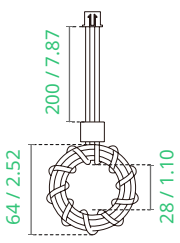
Unit: mm / inch



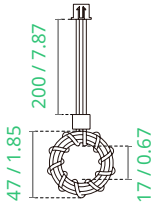
Transmitter



Core-250 A



Core-150 A



Core-75 A