



SolarEdge Safety & Monitoring Interface for Large Scale Installations

SMI-180



SAFETY & MONITORING INTERFACE FOR LARGE SCALE INSTALLATIONS

Benefit from module-level monitoring & automatic safety in commercial and utility-scale installations

- Interface between SolarEdge power optimizers & non-SolarEdge inverters
- Module safety voltage for installer & firefighter safety
- Mobile & web-based module-level performance monitoring and fault detection
- Communication via RS232, RS485, Ethernet or ZigBee
- IP66 – Outdoor installation





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MODEL		SMI-180-XX-01	
DC INPUT			
Number of DC Inputs		1	
Input Type		PG29 x 2	
Maximum Voltage		1000	VDC
Maximum Continuous Current		180	A
Lightning Protection		Yes	
DC OUTPUT			
Number of DC Outputs		1	
Output Type		PG29 x 2	
Maximum Voltage		1000	VDC
Maximum Continuous Current		180	A
Lightning Protection		Yes	
OPERATING POWER (EXTERNAL POWER SUPPLY)			
Input Voltage		36 – 55	VDC
Nominal Power Consumption		12	W
STRING DESIGN			
String Length (power optimizers)	For combiner boxes with <16 strings	4 - 30 optimizers per string (module & inverter dependent)	
	For combiner boxes with 16-18 strings	9 - 22 optimizers per string (module & inverter dependent)	
Number of Input Strings (using the external combiner box)		4 - 18	
Maximum Distance between Power Optimizers and the Combiner Box		150	m
Maximum Distance between the Combiner Box and the SMI-180		10	m
Minimum Distance between the SMI-180 and the Inverter		10	m
Maximum number of SMI-180 per inverter input		10	
ADDITIONAL FEATURES			
Display		LCD & LED for Full Status Review	
Remote Monitoring		Yes	
Module Safety DC Voltage		Yes	
On-site Master Shutdown		Yes	
Supported Communication		2 x RS-485, RS-232, Ethernet, ZigBee (optional)	
STANDARD COMPLIANCE			
Emissions		IEC61000-6-2, IEC61000-6-3, IEC61000-3-11, IEC61000-3-12,	
Safety		IEC-62109	
INSTALLATION SPECIFICATIONS			
Dimensions (W x D x H)		12.5 x 8.4 x 21 / 317 x 214 x 552	In / mm
Weight		55 / 25	lb / kg
Operating Temperature Range		-4 – +140 / -20 – +60	°F / °C
Protection Rating		IP66	
Relative Humidity		0 – 100	%
Input Wiring Gauge		35 - 105mm ²	
Output Wiring Gauge		35 - 105mm ²	
Storage Temperature Range		-40 – +185 / -40 – 85	°F / °C
Storage Humidity Range		0 – 95	%

