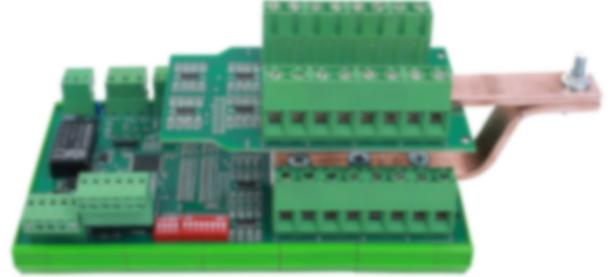


PV STRING MONITORING UNIT

STR100

STR100 is an electronic system for DC string monitoring at photovoltaic (PV) plants. It enables live monitoring of voltage and current at DC boxes and provides the opportunity for quick intervention on string faults. STR100 supports Modbus communication over RS485 and optical cable. Additionally, wireless communication is possible thanks to LoRa communication protocol support.

Compact size and light weight
Easily mounted inside DC boxes (Retrofit possible)
High accuracy and reliability over a wide range of temperature
Internal power supply with up-to-1500Vdc
Monitoring up to 32 strings



GENERAL

Input Voltage	200 - 1500 Vdc 18 - 75 Vdc
Consumption	<15 W <6 W
Measurement Method	Hall Effect

ELECTRICAL PROPERTIES

Max. Measurement Voltage	1500 Vdc
Voltage Measurement Accuracy	%0.5
Max. Measurement Current	25 A / string 40 A / string
Current Measurement Accuracy	%0.5
Communication	Modbus over 485 Modbus over F/O LoRa
Communication Speed	9.600 – 38.400
ID Address	DIP-switch set

DIMENSIONS AND WEIGHT

Height x Width x Depth	54x256x114mm
Weight	640 gr.
Mounting	DIN-Rail

CONNECTION INTERFACES

RS485	1 port(s) (Optional)
Fiberoptic	1 port(s) (Optional)
LoRa	1 port(s) (Optional)
Digital Input	4x 24 V (NO)
Analog Input 1	Pt100 for temperature
Analog Input 2	0 – 20 mA
Analog Input 3	0 – 10Vdc
String Input	24 to 32

OPERATING CONDITIONS

Operation Temperature	-40°C...+85°C
Storage Temperature	-30°C...+70°C

TEST & CERTIFICATION

Type Tests	IEC 61000-4-2
	IEC 61000-4-3
	IEC 61000-4-4
	IEC 61000-4-5
	IEC 61000-4-6
	IEC 61000-4-8

