

VarioString VS-70



Model	VS-70
Electrical characteristics PV array side	
Maximum solar power recommended (@STC)	4200 W
Maximum current	13 A
Maximum solar open circuit voltage	600 V
Minimum solar functional circuit voltage	200 V
Recommended MPPT voltage	250-500 V
Electrical characteristics battery side	
Maximum output current	70 A
Nominal battery voltages	48 V
Operating voltage range	38 - 68 V
Battery grounding possibility	Battery + or battery -
Performances of the device	
Maximum efficiency	> 98 %
MPPT efficiency	> 99.8 %
Maximum stand-by self-consumption (48 V)	< 20 mA (1 W)
Charging stages	4 stages: Bulk, Absorption, Float, Equalization
Battery temperature compensation (with accessory BTS-01)	-3 mV / °C / cell (25°C ref) default value adjustable -8 to 0 mV / °C
Electronic protections	
PV reverse polarity	•
Battery overvoltage	Up to max 80 V
Over temperature	•
Reverse current at night	•
Galvanic isolation	•
PV grounding possibility	PV + , PV - , floating
Ground fault Protection	Programmable
Environment	
Operating ambient temperature range	-20 to 55°C
Humidity	100 %
Ingress protection of enclosures	IP54
Mounting location	indoor
General data	
Warranty	5 years
ISO Certification	9001:2008 / 14001:2004
Weight	5.51 kg
Dimensions h/w/l [mm]	120 / 220 / 350
Solar generation connection (6mm ²)	SUNCLIX™ (Phoenix Contact Tool Free)
Parallel operation (separated PV arrays)	Up to 15 devices
Max wire size	35 mm ²
Glands	M 20 x 1,5
Communication	
Network cabling	STUDER communication BUS
Remote control & Communication	RCC-02/03, Xcom-232i / Xcom-LAN / Xcom-GSM / Xcom-SMS
Menu languages	English / French / German / Spanish
Data logging	With RCC-02/03, Xcom-232i on SD card - One point every minute
Accordance to standards	
EU declaration of conformity	Low Voltage Directive (LVD) 2014/35/EU: - EN 62109-1:2010 Electromagnetic Compliance (EMC) Directive 2014/30/EU: - EN 61000-6-2:2005, - EN 61000-6-4:2007/A1:2011
Accessories	
Remote control RCC-02 or RCC-03	•
Module Xcom-232i	•
Communication sets Xcom-LAN / Xcom-GSM / Xcom-SMS	•
Battery Status Processor BSP	•
2 aux. contacts module ARM-02	•
Battery temp. sensor BTS-01 (3 m)	•
Communication cable CAB-RJ45-8-2	•