



Controllis

Better Power
Anywhere

Smart48 Embedded Power System Controller



Key Features

- Compact form factor with RS485 or Ethernet interfaces for local or remote connection
- Front panel LCD and four buttons for on-site local operation
- Easily software upgradeable and file upload / download via USB or PC with 3G connectivity option
- Advanced battery management, both Lead-acid battery and Lithium Ion battery
- Up to 86 digital outputs can be supported
- Up to 46 digital inputs can be supported
- Control for multiple LVD's
- Battery mid-point monitoring
- Authority management and operator access levels protection
- Event log(up to 90000 records, totally)
- Alarm log(up to 10000 records)
- Programmable Logic Control(PLC) function, more flexible requirements can be supported

Description

- The advanced Smart48 Embedded Power System Controller is a powerful and cost-effective module, developed for monitoring and controlling a wide range of DC power supply systems
- The controller can be used to communicate with small, medium and large power systems. It has a friendly and easy to operate interface
- User can operate the system via the four front keys and the LCD-display
- The system can be monitored and controlled via SNMP

Applications

- Wireless communication
- Broadband and network access Satellite communication ground station 3G,4G base station
- Other telecom applications

General

Power Supply	18Vdc to 75 Vdc
Temperature	Operating: -40°C to +70°C Storage: -40°C to +85°C
Humidity	Operating: ≤95% non-condensing Storage: ≤99% non-condensing
Dimensions	41.5H x 86.5W x 182.5D(mm) (1U*2U)
Weight	420g
Cooling	Natural
MTBF	>400,000h(T ambient : 25°C)
Languages	Multi language(English as default)

Standards Compliance

Safety	IEC 60950-1, EN 60950-1, UL 60950-1	
EMC	Conducted Emission	EN55022 ClassB
	Radiated Emission	EN55022 ClassB
	Immunity to ESD	IEC61000-4-2 Level 3
	Immunity to radiated magnetic field	IEC61000-4-3
	Immunity to EFT	IEC61000-4-4 Level 3
	Immunity to surge	IEC61000-4-5 Level 3
	Immunity to conduction disturbance	IEC61000-4-6 Level 3
Others	CE, TUV, UL	
	ETSI EN 300 019-2(-1,-2,-3)	
	ETSI EN 300 132-2	

Specification

	Standard	Expansion
Analog Inputs	1 bus voltage	Additional 4 via SC210 boards
	1 load current	Additional 10 via SC210 boards
		Additional 72 via SC340 boards
	2 battery voltages	Additional 6 via SC210 boards
	2 battery currents	Additional 6 via SC210 boards
	2 load fuse alarms	Additional 6 via SC210 boards
	2 battery mid-points	Additional 6 via SC210 boards
2 temperatures	Additional 10 via SC320-DI boards	
Digital Inputs	6	Additional 40 via SC320-DI boards
Digital Outputs	6	Additional 80 via SC320-DO boards
LVDs	2	Additional 6 via SC210 boards

Features

System	<ul style="list-style-type: none"> Rectifiers management AC/DC over voltage/under voltage alarm and protect LLVD Fault alarm and protection Input & output voltage measurement Load current measurement Expansion component settings Authority management & password settings PLC settings Alarm level settings(Minor/Major/Critical) Event log(up to 90000 records, totally) Alarm log(up to 10000 records)
Battery	<ul style="list-style-type: none"> Battery float/boost charging BLVD Battery current measurement Battery temperature measurement Battery test and records Battery temperature compensation
Rectifier	<ul style="list-style-type: none"> Available information about each rectifier Rectifier current measurement Rectifier input/output voltage measurement ECO Rectifier slot management
Hybird Energy Support	<ul style="list-style-type: none"> PV Grid Battery DG Grid & battery priority adjustable

Communications Interfaces

Physical	4*RS485,1*Ethernet, 2*CAN,1*USB
Protocols	Http, Modbus, IPV4, SNMP V1/V2c
Local user interface	3 LEDs 4 buttons 2.4#LCD (128X128dots)