



VEGA® CONTROLLER VCNT100



Introduction

- The advanced VCNT100 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;
- Users can operate via the four front buttons and the LCD display. They can monitor and control the system by using the SNMP via Ethernet.

Applications

- Wireless communication
- Broadband and network access
- Satellite communication ground station
- 3G/4G/5G base station
- Other telecom applications

Features

Compact Footprint

- The standard 1U*2U structure saves much space.

Multiple Connections

- Local or remote PC connection via RS485 or Ethernet;
- 2G/3G/4G connection and WEB server are optional;
- Supports up to 104 digital outputs and up to 88 digital inputs.

Smart Management

- Peak shaving and valley filling;
- Advanced battery management (e.g., mid-point monitoring) for both lead-acid and lithium batteries;
- Multiple LVDs control;
- Authority management and operator access levels protection.

Easy Operation

- Front panel LCD and four buttons for on-site using without PC;
- Easy configurable file uploading and downloading via USB or PC, and convenient software update via controller, USB or PC;
- More languages available.



Specifications

MODEL	VCNT100	
GENERAL		
Power Supply	20-70VDC	
Temperature	Operating: -40°C ~ +70°C; Storage: -40°C ~ +85°C	
Humidity	Operating: ≤ 95% (non-condensing); Storage: ≤ 99% (non-condensing)	
Cooling	Natural air flow	
MTBF	300,000h (T_ambient: 25°C)	
Languages	Multi languages (English as default)	
Dimensions (W*H*D, inch)	1.6x3.4x7.2 (1U*2U)	
Weight	1.1lb	
SPECIFICATIONS		
	Standard	Expansion
Analog Inputs	1 bus voltage, 2 bat mid-points, 2 bat voltages	Additional 134 via SC210, SC211 and SC321 boards
	2 load fuse alarms	Additional 72 via SC210, SC211 and SC340 boards
	2 battery currents	Additional 30 via SC210 boards
	1 load current	Additional 72 via SC210, SC211, SC321 and SC310 boards
	2 temperatures	Additional 16 via SC320-DI boards and SC321 boards
Digital Inputs	6	Additional 88 via SC320-DI boards and SC321 boards
Digital Outputs	6	Additional 104 via SC320-DO boards and SC321 boards
LVDs	2	Additional 40 via SC210, SC211 boards and intelligent switch
FEATURES		
System	Rectifier management; AC/DC overvoltage/undervoltage alarm and protection; 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/Custom Define 1/Custom Define 2); Event log (up to 260000 records, totally); Alarm log (up to 100000 records)	
Battery	Battery float/boost charging; BLVD; Battery current measurement; Battery temperature measurement; Battery test and records; Battery temperature compensation	
Rectifier	Available information about each rectifier; Rectifier current measurement; Rectifier input/output voltage measurement; ECO; Rectifier slot management; Peak shaving and valley filling	
Hybrid Energy Support	PV, Grid, Battery, DG, Inversion, Grid & battery priority adjustable	
COMMUNICATION INTERFACES		
Hardware Interface	6*RS485, 1*Ethernet, 2*CAN, 1*USB	
Protocols	HTTP/HTTPS (SSL), Modbus, IPV4/IPV6, SNMP V1/V2c/V3, FTP, Email, NTP	
Local User Interface	2*LEDs, 4*buttons, 1.54# LCD (240X240)	
APPLICABLE STANDARDS		
Safety	IEC 60950-1, EN 60950-1, UL 60950-1	
EMC	Emission: EN55032 Class B; 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	

