

Retrofit controller

Future fit power. It is a simple idea with tremendous effect: Replace your old first-generation Smartpack controller with the Smartpack R to make your power system ready for a high-speed, high-capacity and connected tomorrow. This retrofit will bring your existing power system in line with current requirements, prolong its lifetime and thereby reduce both the lifetime operating costs and the need for new investments in power.



Smartpack R CONTROLLER

Doc 242100.120.DS3 – v2

APPLICATIONS

TELECOM - WIRELESS

- Radio base station / Cell sites
- LTE / 4G / 5G
- MCS
- Microwave
- Broadband

TELECOM – FIXED

- Central office / CORD
- Fiber
- Broadcast
- Data center

RETROFIT CONTROLLER

The Smartpack R is a replacement for the first generation Smartpack 1 controllers, manufactured and sold between 2005 to 2018, meant first and foremost for retrofitting of mid-range Eltek power systems from that period. It has the same form factor, i.e. the same dimensions and connections as the original Smartpack 1 and is fully backwards compatible.



KEY FEATURES

- **BACKWARDS COMPABILITY**
Form, fit, function compatible with legacy Eltek Smartpack controller
- **ETHERNET**
IPv4/v6, Responsive HTML5 web interface, SNMPv3, MODBUS TCP, RADIUS, security penetration tested
- **SYSTEM CAPABILITIES**
All Eltek power modules, including Rectifiers and CAN Nodes such as Fleximonitor
- **TELECOM SITE MONITORING**
Serial Ports/USB: USB B-type, USB A-type
Host for dongles, WiFi, 4G modems, Bluetooth, Flash drives, etc.
RJ-11 w/RS-232/RS-485 w/ MODBUS RTU
Slave for SCADA and MODBUS RTU
Master for data collection from 3rd party equipment with generic configurable protocol for Smartmeters, etc. and fixed protocols for Li-Ion batteries etc.

TECHNICAL SPECIFICATIONS

Model	Smartpack R
Part number	242100.120
INPUT DATA	
Voltage (nominal)	10 - 75 V _{DC}
Power Consumption	3 W (display sleep, no dist. CAN Power, LVD activation, no USB power) 25 W (display on, dist CAN Power, LVD activation, USB Power)
SYSTEM CONNECTIONS - SYSTEM MONITORS	
Voltage sense, system voltage support	12 V _{DC} , 24V _{DC} , 48V _{DC} & 60V _{DC}
Current sense, shunt support	0 - 20mV, 0-50mV, 0 - 60mV and 0-100mV
Battery fuse monitoring	Auxiliary switch NO/NC, Pull up/down
Load fuse monitoring	Auxiliary switch NO/NC, Diode Matrix Pull up/down
Battery temperature monitoring	AD590 sensor input
Battery symmetry monitoring (built in)	4 x Analog Voltage[0-75V] inputs (12, 24 or 60V blocks)
SYSTEM CONNECTIONS - LVD CONTROL	
Battery disconnect	1 (latched or non-latched supported)
Load disconnect	2 (latched or non-latched supported)
GENERIC INPUTS AND OUTPUTS	
Digital configurations, Inputs #1-6	Auxiliary switch: NO/NC
Analog configurations, Inputs #1-2	Analog Voltage[0-75V] (Configure as NO, NC, Diode Matrix sense or Voltage sense)
Analog configurations, Inputs #3-6	Analog Voltage[0-75V] (Configure as NO, NC, Diode Matrix sense or Voltage sense) Support: Temperature sense w/ NTC probe
Output configurations, Outputs #1-6	6x Relay–Dry/Form C - Configurable Normally Open/Closed [Max capacity 75V/2A/60W]
CONTROL SYSTEM CONNECTIONS	
CAN Power	Distributed CAN Power available +/- 500mA
CAN Nodes	Support: I/O Monitors, Battery String Monitor, Load/Current Monitor, Fleximonitor, AC Mains Monitor & Smartnode (legacy)
USER INTERFACE	
Local	Alphanumeric LCD display (Chinese Traditional and Simplified supported) & 3 keys
Ethernet port (eth 0: LAN port) (eth 1: Craft port w/DHCP, USB Device port)	10/100 BASE-T (optional: 1000 BASE-T) IPv4/v6 IP protocols: HTTP (HTML5 Responsive User Interface) / SSL(TLS w/ self-signed certificate generator or load authenticated certificates), SNMP v3 w/Generic MIBs & Enterprise MIB type: SP2-MIB (Eltek Branch 10), MODBUS TCP and pComm UDP (PowerSuite), VPN, VLAN, NTP, SFTP & RADIUS
USB Host	Flash Drive for SWFW upgrade and XML configuration file loading Config read from Smartpack 1 Gen USB Device port wlan0: WiFi dongle for wireless craft port, wwan0: 4G USB Cellular Modem eth2: Ethernet Gigabit
USB Device	PC – pComm – Windows PowerSuite
Serial ports	RS-232 and RS-485 on RJ11 connector Serial protocols: MODBUS RTU Slave, MODBUS RTU/ASCII Master (several pre-defined types and full generic configurable data reader available), Modem Call-Back/SMS reporting (PSTN or GSM) and pComm (PowerSuite)
GENERAL SPECIFICATIONS	
Dimensions (WxHxD)	109 x 44 (1U) x 156 mm (4.3 x 1.75 x 6.1") [Chassis dept: 140 mm]
Temperature Range	Operating -20 to +65°C (-40 to 149°F)
DESIGN STANDARDS	
Electrical safety	UL 60950-1, 2ed, 2014-10-14, EN 60950-1:2006/A2:2013
EMC	ETSI EN 300 386 V.2.1.1, EN 61000-6-1(2007) /-2(2005) /-3(2012) /-4(2011), FCC CFR47 Part 15B section 109: 2010
Environment	ETSI EN 300 019: 2-1 v2.3.1 (Class 1.2), 2-2 v2.4.1 (Class 2.3) & 2-3 v2.4.1 (Class 3.2) 2011/65/EU (RoHS) & 2012/19/EU (WEEE) Normal operating conditions as per IEC 62040-5-3:2016 clause 4.2. Other operating conditions as per IEC 62040-5-3:2016 clause 4.3, must be advised