DL28

Communications processor

Highlights

- **Data communication connections between measuring and control devices in a heating substation**
- **Integration of substations into remote monitoring and control systems**
- **Data logging**
- **32-Bit CPU @ 454MHz**
- **Linux operating system**
- **256MB DDR2 SDRAM**
- **microSD card, push-push connector**
- **Ethernet interface**
- **USB Host, Device, On-The-Go ports**
- **RS-232 and RS-485 DCE serial interfaces**
- **M-Bus Master and Slave ports**
- **Galvanically isolated ports**
- **DC power supply (18-36V)**
- **35mm DIN mounting rail**

Description

DL28 is a communications processor that handles data communication connections between measuring and control devices in a heating substation and their integration into remote monitoring and control systems (SCADA) by using diverse transfer routes. DL28 can be connected to SCADA programs in several ways: via local area networks (LAN), wireless computer networks (WLAN), CATV modems, GSM/GPRS/3G routers, as well as via other standard and wireless modems. An established communication link allows for real-time remote monitoring and read-outs of process variables at the heating substation, as well as of alarm conditions.

The DL28 has a plastic enclosure for mounting with a 35mm DIN mounting rail. The front panel features power supply connectors, connectors for USB peripherals, memory cards, Ethernet and serial communication, as well as LED indicators. The communications processor supports microSD memory cards via a push-push connector.
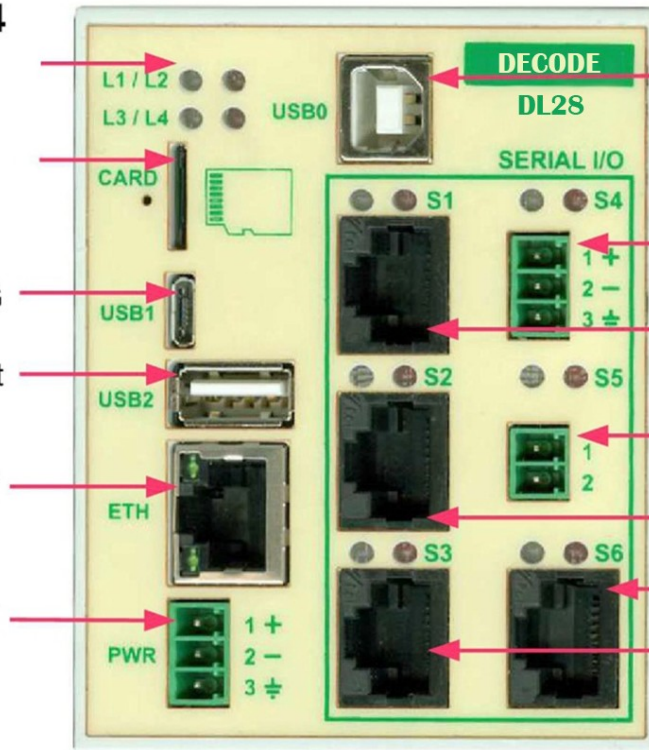
Front panel

L1, L2, L3, L4
LED indicators

CARD
Memory card

USB1 USB OTG

USB2 USB Host

ETH
Ethernet 10/100T

PWR
18-36VDC

USB0 USB Device

S4 M-Bus Master

S1 RS-232

S5 M-Bus Slave

S2 RS-232/485

S6 RS-232/485

S3 RS-232/485

Technical specification

PROCESSOR BOARD	
Central processor	32-Bit MCU Core ARM926EJ, 454MHz
Operating system	Linux 2.6.35
Memory	256MB DDR2 SDRAM
Disc	4GB Flash
USB	1 x USB2.0 Hi-Speed Host, 1 x OTG
Ethernet	RJ45, 10/100TBase
Memory card	microSD, push-push connector
Real Time Clock (RTC)	Implemented (powered by a CR1220 battery)
COMMUNICATION BOARD	
USB	1 x USB2.0 device, galvanically isolated, FT232R
Serial ports	Galvanically isolated with send and receive LED indicatorsn S1 – RS-232C (TD, RD, DTR, RTS, CTS, RI, DCD signals) S2 – RS-232C (TD, RD, RTS, CTS signals) or RS-485 (A+ & B-) S3 – RS-232C (TD, RD, RTS, CTS signals) or RS-485 (A+ & B-)
M-Bus BOARD	
Serial ports	Galvanically isolated with send and receive LED indicatorsn S4 – M-Bus Master, up to 3 Slave devices S5 – M-Bus Slave S6 – RS-232C (TD, RD, RTS, CTS signals) or RS-485 (A+& B-)
COMMON CHARACTERISTICS	
Power supply	8~30V DC
Power consumption	5W
Enclosure protection	IP40
Temperature range	from -20°C to +55°C and from 0 to 95% RH (without condensation)
Dimensions	70 x 85 (91) x 73mm
Mounting	DIN rail 35 mm

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