radio data modems **CDX 800**

Radio data equipment

NEW

we are wave experts...

**I/O
RS232
RS485
MBUS**

SCADA AND TELEMETRY APPLICATIONS

CONTROLLING SYSTEMS INTERCONNECTION

DATA COLLECTION FROM VARIOUS METERING DEVICES

REMOTE CONTROL

Description

Radio data modems CDX 800 are communication equipment for wireless data transmission and control. Modems are designed for local radio data networks but by using relay it is possible to cover even larger geographical areas. CDX modems are also equipped with I/O port so they can control some simple technology mainly in industrial sector.

CDX modems features

- Frequency range CDX 800 (869) MHz
- Transmission power 1 – 315 mW
- Communication speed 24 kbps (10% TX/RX)
- On-line packet data transmission
- Transmitted data protection and compression
- Support more than 50 communication protocols for industrial controlling systems, metering devices and other equipment (MODBUS, S-BUS, AT modem, MBUS etc.) – it is possible to create or add protocol on request of customer

**waterworks
engineering**

energetics

**heating
service**

transport

CDX modems network features

- Free of charge operation (look at your locale free frequencies)
- There is not need of direct visibility among network points
- Every radio data modem CDX can work as an end point and relay station at the same time
- Data packet transmission by Store and Forward method
- Communication among random network points
- Fixed or automatic data packets routing in network – modems developing routing tables at the base of network traffic information. Network responds automatically while failure in transmission occurs or new station is added.
- Possible integration into GPRS networks, Internet etc.

User interface

- Communication port 1 – RS232 or RS485 Communication port 2 – RS232/RS485/MBUS
- CIO – five signals that is possible to configure as analogue inputs, binary inputs or binary outputs (this interface could be used for data collection or technology control)
- Every interface can communicate by different speed and different communication protocol

Diagnostics and service functions

- Full remote administration and configuration from any point of network
- Diagnostics on VF channel and communication interfaces – detailed records stored for last 4 days
- Event log (8000 records, cca 300 types of events)
- Software configuration of all CDX modem parameters, radio channel signal level measuring, inner temperature and supply voltage measuring

Example of application – heating service

PLC	Manometer	Thermometer
RS232	CIO 1	CIO 2

MBUS line – heating meters
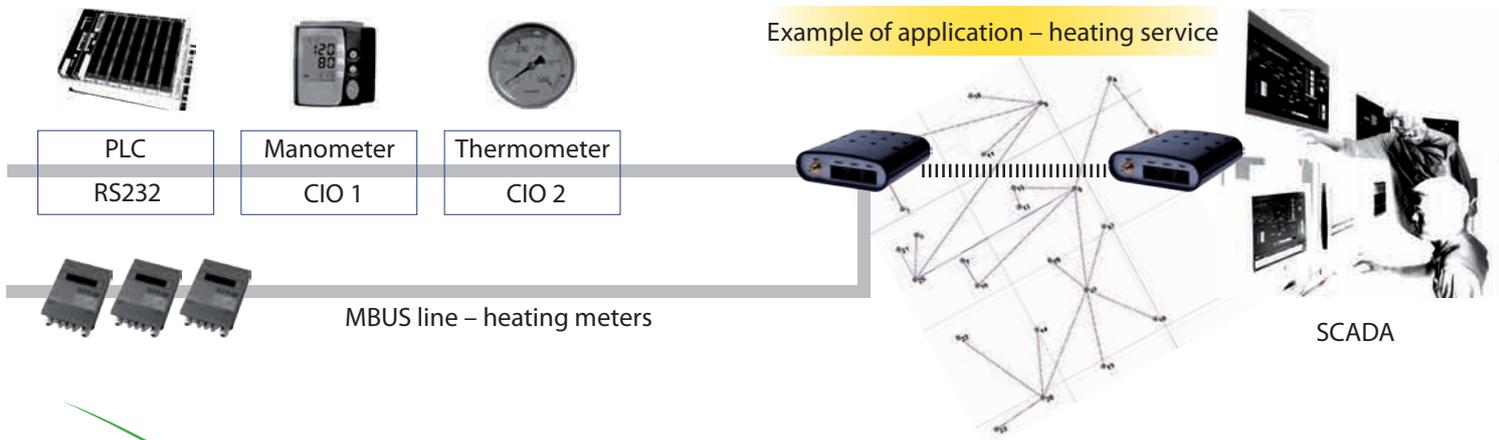
SCADA

Telemetry • SCADA

• monitoring and dispatcher´s control of local technology in waterworks engineering, energetics, heating service, transport, using on water purification plants • etc.

Industrial automation

• interconnection of control and information systems (PLC etc.) • communication between moving parts of machines, production lines, portal cranes, mining machines • remote inputs / outputs • substitution of cable lines • wind power stations • etc.

Local data collecting from meters

• heating meters • electrometers • water meters • seismometers • loggers • etc.

Remote control and monitoring

• road signs • parking information boards • streetlight • process equipment in chemical industry and metallurgy • security systems in company area • wireless control of air-conditioning, air duct systems, heating in historical buildings • etc.

TECHNICAL SPECIFICATION

Frequency range	869 MHz
Transmission power	from 1 to 315 mW
Communication speed	24 kbps (10% TX/RX)
Temperature range	storage from -40 °C to +85 °C, operation from -20 °C to +55 °C
Supply voltage	10 – 30 V DC
Consumption	TX 3 W RX 350 mW
Dimensions	30 × 90 × 102 mm (fitting DIN35 mm ledge)
Weight	150 g
Antennal connector	RPSMA – 50 Ohm
User interface	PORT1 – RS232 or RS485 – conn. RJ45 (150 b/s – 115 200 b/s) PORT2 – optional – RS232 or RS485 or M–BUS CIO (I/O) – 5 programmable inputs (analogue, binary) / outputs – extending CIO modules)

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