

4DTC

Metering Data Concentrator



A Metering data concentrator that includes a **Powerline communication module (PLC)** with **network monitoring** functions, in addition to **remote smart meter management** functions.

Additional Features

The Data Concentrator also offers a range of other functionalities including:

- ✓ Remote firmware upgrade capability, WEB/ TELNET configuration options,
- ✓ connection to the ZIV AMI Manager (a PLC debugging tool),
- ✓ NTP synchronization,
- ✓ a hardware watchdog for enhanced system reliability,
- ✓ SNMP management for efficient network monitoring,
- ✓ secure access control for authorized usage,
- ✓ secure file transfer protocol for safe data exchange,
- ✓ and a Transport Layer Security (TLS) protocol for secure communication.

The **4DTC** model is a Metering Data Concentrator equipped with a Powerline Communication Module (PLC) that not only facilitates remote smart meter management functions but also incorporates network monitoring capabilities.

It is designed to automatically identify the meters within its low-voltage (LV) network and operates using the PRIME (1.3&1.4) topology.

PRIME
ALLIANCE



Communication Interfaces

PRIME BASE NODE

Dual PRIME1.3 & PRIME1.4
1..8 FCC bands.
Smart three phase/selectable single phase.

ETHERNET PORTS

ETH WAN: 10/100 BaseT connector.
10 kV AC/50 Hz.
ETH LAN: 10/100 BaseT connector.
2 kV AC/50Hz.

Serial Port (SRV). Service interface

RS232 (DB9). 1 kV AC/50 Hz.

Application Protocols

(meters) DLMS/COSEM (AES-GCM-128).
(HES) XML/Web Services over SOAP.

Access Control Protocol

TACACS+
LDAPS SimpleBind Mechanism.

Access Protocol

SSH.
Telnet (enable/disable).
Web Service (WebUI). HTTPS.

Transport Layer Protocol

TLS version 1.2 or higher.
X.509 identity (public and private key).

File Transfer Protocol

SFTP.

Synchronization Protocol

NTPv4.

Monitoring Protocol

SNMP v3 or higher.

Technical Information

Power supply

3x127-230 Vac (-20% ..15%). 50Hz
2 kV AC/50Hz

Consumption	8 W total / 35 VA per phase (due to PLC coupling).
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Environmental conditions

Operating and storage	-25°C to 70°C
Humidity	<95% (non-condensing).

Enclosure

ZIV Universal Polycarbonate Box.
IP:2XB (EN 60529).

Dimensions

220 x 140 X 93.6 mm.

Mounting options

Wall/ DIN rail mount.

