

CIC

Concentrator / Diffuser for Electrical Substations



The **CIC** is a serial device server that allows flexible and secure connection of RS-232 / RS-485 **asynchronous serial** devices to an **IP network**.

The **CIC** includes and optional WAN interface that increases connectivity possibilities, making use of the wireless public networks. Dual SIM option assures service availability.

The **CIC** can be managed locally and remotely, through a local console, Telnet and SSH server, or through a built-in web server (HTTP).

The **CIC** is able to transport different **serial protocols**. Some of the supported protocols are: IEC 60870-5-101/102/103, DLMS, GESTEL, PROCOME, DNP3.0, SAP20, MODBUS, Pid1, Twc, etc.

The **CIC** supports the **SNMPv1** and **SNMPv2c** management protocols, as well as other protocols and services such as **DHCP**, **NTP**, **TACACS+**, **IPSec** or **SSL/TLS** client.



Main Applications

- ✓ Secure access to inaccessible sites.
- ✓ Easy deployment of access for backup on those sites previously communicated by other means.
- ✓ Integration of operative telecontrol, metering units, and others.

Equipment Interfaces

- ✓ 1 service console (DCE mode).
- ✓ 1 Ethernet switch with two ports type 10/100Base-Tx (RJ-45) or type 100Base-Fx (MT-RJ) multimode (1300 nm).
- ✓ 1 asynchronous serial port (COM1), configurable by software for RS-232 interface or RS 485 interface (2-wire or 4 wire).
- ✓ Four (COM2 to COM5) or eight (COM2 to COM5 & COM6 to COM9) additional asynchronous serial ports, configurable by software for RS-232 interface. All of them with 9-pin SUB-D connectors or optical fiber transducers (plastic or glass).
- ✓ Optionally, 1 wireless WAN interface (GPRS/UMTS/HSDPA), with one or two slots for SIM cards.

Management System

Local and remote access via **console** or built-in **web server** (HTTP/HTTPS), **Telnet** and **SSH** connection.

Additional Services

- SNMP v1 and v2c.
- DHCP, NTP and management access with TACACS+.
- IPSec or SSL/TLS client.

Technical Information

Asynchronous serial ports

- ✓ Data bits: 5, 6, 7 or 8. Stop bits: 1 or 2.
- ✓ Parity: odd, even or none.
- ✓ Speed: 600 bit/s to 115200 bit/s
- ✓ Flow control: none, hardware or software
- ✓ COM2 to COM9: V.24/V.28 of the ITU-T (RS-232C)
- ✓ COM1: V.24/V.28 of the ITU-T (RS-232C) & RS-485 (2w or 4w)

Encapsulation protocols

- ✓ IEC 60870-5-101/102/103 (the first two with the variants to support link addresses of 1 or 2 bytes)
- ✓ DLMS, SAP20, DNP3.0, GESTEL, MODBUS, PROCOME, Pid1, Twc

Optical fiber transducers

- ✓ Glass fiber: ST, 820 nm, 5 Mb/s, 50/125 µm, 62.5/125 µm, 100/140 µm and 200 µm, 2 km con 62.5/125 µm, LED
- ✓ Plastic fiber: Versatile Link, 660 nm, 40 kBd, POF of 1 mm Ø, 120 m, LED

WAN interface

- ✓ Quad band GSM/GPRS/EDGE 850/900/1800/1900 MHz
- ✓ UMTS/HSDPA: Dual band, 900/2100MHz
- ✓ GSM/GPRS: Dual band, 900/1800MHz

Service port

- ✓ DB9 female connector (DCE mode). Speed of 115200 bit/s

Mounting

Stand-alone (19"/1 s.u. chassis).
Dimensions: Height: 45 mm; Width: 484 mm; Depth: 213 mm.
Weight: 2 kg

Power supply

20-75Vdc (48Vdc nominal) or multirange (85-360Vdc, 60-260Vac)
Maximum consumption: 20 W

Temperature range

From -20° C to +70° C

Material

Grey (RAL 7024) zinc-plating iron

