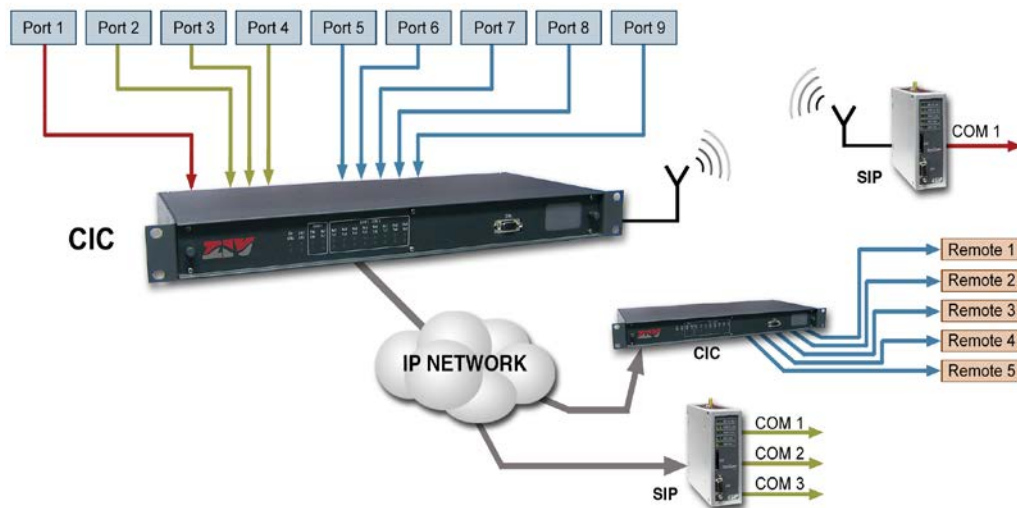


CIC

Concentrator / Diffuser for Electrical Substations



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

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

CIC technology

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

The CIC supports the SNMPv1 and SNMPv2c 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.
- 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 management through a console or built-in web server (http), SSH and Telnet server.

Additional services

- SNMPv1 and SNMPv2c.
- DHCP, NTP and management access with TACACS+.
- IPSec or SSL/TLS client

Technical Information

Asynchronous serial ports	<ul style="list-style-type: none"> ➤ 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) and RS-485 (2w or 4w).
Encapsulation protocols	<ul style="list-style-type: none"> ➤ 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	<ul style="list-style-type: none"> ➤ Glass fiber: ST, 820 nm, 5 MBd, 50/125µm, 62.5/125µm, 100/140µm and 200µm, 2 km with 62.5/125µm, LED. ➤ Plastic fiber: Versatile Link, 660 nm, 40 kBd, POF of 1 mm Ø, 120 m, LED.
WAN interface	<ul style="list-style-type: none"> ➤ Quad band GSM / GPRS / EDGE850 / 900 / 1800 / 1900MHz. ➤ UMTS/HSDPA: Dual band, 900/2100MHz. ➤ GSM/GPRS: Dual band, 900/1800MHz.
Service port	<ul style="list-style-type: none"> ➤ DB9 female connector in DCE mode. ➤ Speed of 115200 bit/s
Mounting	<ul style="list-style-type: none"> ➤ Stand-alone (19"/1 s.u. chassis). ➤ Dimensions: Height: 45 mm; Width: 484 mm; Depth: 213 mm. ➤ Weight: 2 kg
Power supply	<ul style="list-style-type: none"> ➤ 20-75 V_{DC} (48 V_{DC} nominal) or multirange (85-360V_{DC}, 60-260V_{AC}) ➤ Max. consumption: 20 W
Temperature range	From -20° C to +70°C
Material	Grey (RAL 7024) zinc-plating iron

