Ethernet Router

ED-210

- ⊞ Remote connectivity between sites saving time and money
  - Ideal when DSL circuits are unavailable
  - Up to 33.6 kbit/s via integral V.34 modem
  - 4 port Ethernet switch for access to industrial equipment
- ⊞ High security remote access solution
  - Dial up solution avoiding Internet technology
  - Modem dial back security
  - Firewall filtering to manage bandwidth and provide security
- ⊞ Designed for use in harsh industrial applications
  - Dual 10 – 60 VDC power input
  - Total galvanic isolation
  - Transient protection and watchdog
- ⊞ Robust for long service life
  - 558,000 hours MTBF to MIL-HDBK-217K
  - –25 to +65°C (–13 to +149°F) with no moving parts
  - Industrial EMC, shock and vibration testing

CE **FC** Part 15 **EN 61000-6-2** Industrial Immunity   **EN 61000-6-4** Industrial Emission   **EN 50121-4** Railway Trackside

The ED-210 is an industrial Ethernet router designed to allow remote connections to sites using the integral PSTN modem, or to allow sites to be directly connected to each other using an analogue circuit. The modem can provide connection rates up to 33.6 kbit/s, however data compression can increase the data throughput. A 4 port managed switch allows several industrial units (PLCs, HMIs or drives) to be connected locally.

Using a PSTN dial back solution for remote access provides an incredibly secure solution avoiding using the Internet for access. A simple port level IP firewall allows unwanted traffic to be filtered which can add to security, but can also ensure that unwanted traffic is not passed through the low bandwidth modem connection.

The modem is equipped with transient protection on the line side and a "watchdog" that monitors and automatically resets the modem in the event of a fault; a critical function on unmanned sites. The wide power range, galvanic isolation on all ports and compact design make it ideal for easy installation in industrial applications.
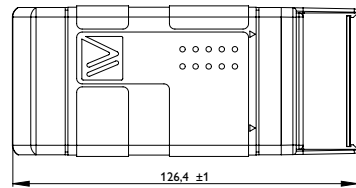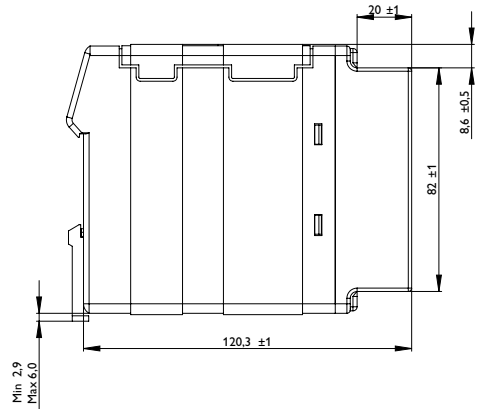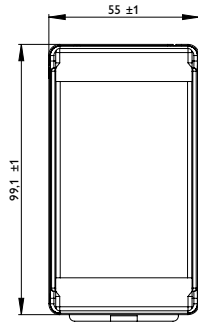
Only industrial grade components are used which gives the ED-210 an MTBF of 558,000 hours and ensures a long service life. A wide operating temperature range of –25 to +65°C (–13 to +149°F) can be achieved with no moving parts. The ED-210 has been tested both by Westermo and external test houses to meet many EMC, isolation, vibration and shock standards, all to the highest levels suitable for heavy industrial environments and rail trackside applications.

Ordering Information

Art.no	Description
3609-5001	ED-210
3125-0001	PS-30, Power supply, DIN mounted (Accessories)

Specifications ED-210

Dimensional drawing

Dimension W x H x D	55 x 100 x 132 mm (2.16 x 3.93 x 5.19 in)
Weight	0.3 kg
Degree of protection	IP 20

Power	
Operating voltage	10 to 60 VDC
Rated current	370 mA @ 12 VDC 190 mA @ 24 VDC 110 mA @ 48 VDC

Interfaces	
Leased Line	1 x 2 position detachable screw terminal, 600 bit/s to 33.6 kbit/s
PSTN	1 x RJ-11C, 600 bit/s to 33.6 kbit/s
Ethernet TX	4 x RJ-45, 10 Mbit/s, 100 Mbit/s

Temperature	
Operating	–25 to +65°C (–13 to +149°F)
Storage & Transport	–25 to +70°C (–13 to +158°F)

Agency approvals and standards compliance	
EMC	EN 61000-6-2, Immunity industrial environments
	EN 55024, Immunity IT equipment
	EN 61000-6-4, Emission industrial environments
	FCC part 15 Class A
	EN 50121-4, Railway signalling and telecommunications apparatus
	IEC 62236-4, Railway signalling and telecommunications apparatus
Safety	EN 60950-1, IT equipment
PSTN	ETSI TS103 021-1, ETSI TS103 021-2, ETSI TS103 021-3