EMR-2
Compact Wan Router

Intended for harsh industrial conditions, exceeding the stringent levels of isolation, immunity and protection

- Integrated switch
- Possibility of RS-232/RS-485 serial port
- GSM / GPRS (2G), UMTS / HSDPA (3G) and LTE (4G) transmission technologies
- Dual SIM operation
EMR-2

Description

Product overview
The EMR-2 is an industrial router especially designed to provide layer 3 connectivity by using public wireless networks in order to:
- Safely integrate an existing remote IP network with an Intranet,
- Allow safe access to the devices connected to the router from and to the Internet,
- Integrate a remote device (host), independent or connected in a remote LAN, in an existing or new IP network, in a reliable manner.

The EMR-2 admits three options as regards the cellular interface, which are mainly differentiated by the bandwidth they can offer the user.

The dual SIM operation option allows increasing the service availability since it provides access to more than one operator.

Applications
The most significant applications of the EMR-2 router are:

Remote access to local networks or to Ethernet devices
The EMR-2 router allows complete vertical integration of a company’s local and remote networks.

Back-up and Alternative Control links
The EMR-2 router may be used as a redundancy solution in those applications where the priority is the network availability.

As a solution for alternative control, it allows access to the “network nodes” in infrastructure networks (telecommunications, highways, electricity, etc.) when the main channels are not available.

Mobile networks
The EMR-2 router uses the wireless networks to access the networks from a device located in a mobile unit (ship, train, truck, etc.).

Safe access to remote data
The capacity of the EMR-2 router to establish IPSec tunnels allows reliable access to a remote device (host) connected in an Ethernet network.

Video transmission
The EMR-2 router can be connected online to a surveillance video camera with Ethernet output.

Connections in remote locations
The use of the wireless networks allows IP connectivity for devices in places where it is difficult to install a telephone line, such as mountainous and rural areas, wind farms, etc.

Example of establishing mobile networks
Technical specifications

Router characteristics

- Port speed automatic detection
- Static routing information (configured by the user)
- Dynamic routing information (RIP routing protocol)
- VRRP redundancy protocol
- NAT rules
- IPSec tunnels with DMVPN (Dynamic Multipoint VPN) support
- NHRP (Next Hop Resolution Protocol)
- IPIP (IP over IP) and GRE tunnels
- VLANs management per port. The Fast Ethernet ports can have different IP addresses
- Filtering
- Stateful IP firewall

Equipment management

- Local and remote management through a console (115200 bit/s) or a built-in web server (HTTP/HTTPS), SSH and Telnet server

Additional services

- Support of SNMPv1, SNMPv2c and SNMPv3 protocols, as well as other protocols and services such as DHCP, NTP, TACACS+ and RADIUS

Mechanical characteristics

- DIN rail mounting (EN 50022, BS 5584, DIN 46277-3)
- Dimensions: Height: 67 mm; Width: 220 mm; Depth: 140 mm
- Weight: 750 g

Available models

- RS-232 service console version
- RJ-45 service console version plus RS-232/RS-485 interface

Equipment interfaces

- 1 RS-232 or RJ-45 service console (DCE mode)
- 1, 2, 4 or 6 Fast Ethernet ports type 10/100Base-Tx with RJ-45 connector
- 1 wireless WAN interface GSM/GPRS (2G), UMTS/HSDPA (3G) or LTE (4G), with 2 external SIM card slots
- 1 optional port with RS-232/RS-485 interface

Operating conditions

- Power supply: multirange (38-310 VDC, 80-260 VAC)
- Maximum power consumption
  - At 48 VDC: 5 W
  - At 230 VAC: 9 W
- Temperature and humidity: from -25 °C to +70 °C and relative humidity not greater than 95%, in accordance with IEC 721-3-3 class 3K5 (climatogram 3K5)

Intended for harsh industrial conditions, exceeding the stringent levels of isolation, immunity and protection
7 Manufacturing facilities & 15 Customer support centers

Chicago (USA)  Mexico (MEX)  Niteroi (BRA)  
Dublin (IRL)  Newcastle (GBR)  
Paris (FRA)  Grenoble (FRA)  
Zamudio (ESP)  Madrid (ESP)  Barcelona (ESP)  
Dubai (ARE)  Ryhad (SAU)  
Bangalore (IND)  
Singapore (SGP)  
Yakarta (IDN)

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