

IMOLAE

MODULAR ROUTER RACK MOUNTABLE FOR INDUSTRIAL APPLICATIONS

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ImolaE integrates in a modular, configurable and highly reliable device, particularly suited to industrial environments subject to electromagnetic disturbances, both data and voice routing over fixed or mobile LAN and WAN channels in the following application areas:

**UTILITIES
ENERGY
TRANSPORT
...**

The modular architecture allows the product to evolve over time with the integration of new features and new communication channels on the system already installed. Automatic backup on ISDN and the presence of redundant power supplies guarantee continuous up-time

ImolaE provides in a single modular system the maximum integration among different channels of communication: Wired or fibre optic Ethernet, ISDN, serial V.35, V.24/V.28, E1 G.703 WAN, interface to analog phones, PSTN for VOICE transport with IP protocols on both local and geographic networks. An analog modem with backup features is also provided.

Modular:

- 2 basic cards for LAN, WAN, ISDN
- 6 expansion slot
- rack Units 19", 3U height

Reliable:

- two redundant power supplies
- backup communication channels
- independent hot-swappable cards

Robust:

- Extended operating temperature range -10 to + 55 ° C
- Suitable for industrial environments subject to electromagnetic disturbances



ImolaE provides a basic configuration (the two redundant power supplies, CPU card in slot 0, a V.35 WAN card in slot 1), and 6 slots for expansion cards: V.35 WAN, WAN G.703, VOIP, LAN Switch, PSTN. Additional cards may be provided depending on the application requirements.

Power supplies operate in a load sharing configuration with active reserve
3 alternative configurations are possible:

- > 2 power supplies 24 V \pm 20% direct current (positive ground)
- > 2 power supplies 48 V \pm 20% direct current (positive ground)
- > 2 feeders 220 V AC \pm 20%.

Technical Features

Processor	RISC Network Processor
DRAM Memory	Default 64 MB – Maximum 128 MB @ 66/133 Mhz
Flash Memory	Default 16 MB – Maximum 64 MB
Boot Flash	512 kB

Cards

CPU card

Ethernet	N.1 LAN optical interface 100 base FX - type SC cable for multimodal fibre 100Mbit/s
Console	N.1 serial port console - RJ45 cable (asynchronous, until 115.2 Kbps)
LED	N. 2 LED card status

WAN V.35 card

Ethernet	N.1 LAN interface 10/100 base TX - RJ45 cable
Console	N.1 serial port console - RJ45 cable (asynch, until 115.2 Kbps)
WAN	N.1 WAN serial interface V.35 - ISO DIN 2593 cable
ISDN	N.1 ISDN interface BRI S/T - RJ45 cable
LED	N. 6 LED: 2 Card status 2 LAN status 2 ISDN status

WAN E1 card

Console	N.1 serial port console - RJ45 cable (asynch, until 115.2 Kbps)
WAN	N.1 WAN serial interface G.703 - Microcoax cable
LED	N. 7 LED: 2 Card status 5 E1 status

SWITCH card

Ethernet	N. 4 LAN interface 10/100 base TX - RJ45 cable N. 2 LAN optical interface 100 base FX - SC cable for multimodal fibre 100Mbit/s
Console	N.1 serial port console - RJ45 cable (asynch, until 115.2 Kbps)
LED	N. 10 LED: 2 Card status 2x4 LAN 10/100 base TX status

Protocols

Networking	LAN Bridging, IPv4/IPv6, TCP-UDP, Quality of Service, DDR – Dial on Demand Routing ISDN (Call Back, CLI identification – Caller and Calling, Channel aggregation)
Routing Protocols	Static; RIPv1, RIPv2; BGP-4, BGP-4+, OSPFv2, Multicast Routing (PIM SM V2, PIM DM, IGMP Proxy, Static Multicast Routing Table), VRRP (Virtual Routing Redundancy Protocol), DLSW (Data link Switching - SNA over IP)
SNMP	Full support of SNMP v2
Security	PAP, CHAP, and ACLs, RADIUS Support, NAT/PAT, SSL tunneling, GRE Tunneling VPNs with IPSec 3DES Encryption, ACL and Stateful FIREWALL
Frame Relay	Multi-protocol over Frame Relay RFC 2427, up to 8 active PVC, ITU-T X.36, ANSI T1 617 Annex D, ITU-T Q.993 Annex A
Services	Telnet Server, SSH server, DHCP server and client, Syslog (Local and remote), Traceroute, SAA (Service Assurance Agent)
Configuration	Command Line Interface (CLI), Text/Menu oriented and Telnet

Physical Features

Size	19" - 3U
Power consumption	< 40W Full configuration
Power	N.1 o 2 PSU DC/DC 24V e 48V DC N.1 o 2 PSU AC/DC 100-240 VAC

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Via Asti, 10015 Ivrea (TO) - Italy
Tel: +39.0125.230.544 // Fax: +39.0125.631.923
mail@tiesse.com // www.tiesse.com



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