INSYS icom

Industrial Data Communication

DIN rail
MoRoS GRPS / HSPA

Transmission technology

Shape		3G/HSPA	GSM/GPRS/EDGE	xDSL	Ethernet	WLAN	Analogue	ISDN
	DIN-Rail serial	☐	☐	☐	☐	☐	☐	☐
	DIN-Rail network	■	■	☐	☐		☐	☐
	Desktop	☐	☐				☐	☐
	19´´ Rack						☐	☐
	Embedded Module	☐	☐	☐	☐	☐	☐	☐

Mobile access to Ethernet devices

The industrial router MoRoS combines a modem, a router and a switch in one device. It can dial-in over mobile networks (3G/HSPA, GPRS/EDGE)

The dial-in and dial-out functionality enables remote maintenance and operation of devices in an Ethernet network.

The integrated switch allows a direct connection for up to five network devices. Via a web interface the configuration ot the MoRoS is very fast and easy.
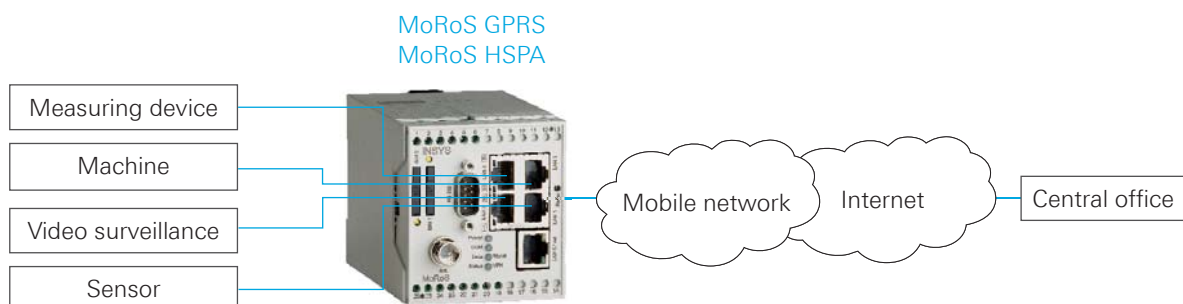
A firewall and integrated VPNs (openVPN, IPsec) care about data security. With the integrated Linux Sandbox users can implement their own applications.

Features

- Broadband, HSPA or GPRS modem
- Dial-In and Dial-Out router
- Integrated communication module
- 4+1 port switch with 10/100 Mbit/s
- Redundant communication ways
- User programmable Linux Sandbox
- VPN security
- Connection to INSYS Connectivity Service possible

Applications

- Access to control network with PLC, HMI, data logger
- Modem substitute for devices with Ethernet interface
- Video monitoring
- Displays
- Alarm messages

MoRoS GPRS
MoRoS HSPA

Measuring device	
Machine	
Video surveillance	Mobile network — Internet — Central office
Sensor	

Mobile Communikation	
MoRoS GPRS	2G: 850/900/1,800/1,900 MHz; CSD, GPRS/EDGE Class 12
MoRoS HSPA	2G: 850/900/1,800/1,900 MHz; CSD, GPRS/EDGE Class 12 3G: 2,100 MHz; UMTS, HSDPA, HSUPA
Antenna	FME connection
SIM	2 slots for redundant SIM cards
Router	
Function	Dial-In, dial-out, callback, connection management, DHCP server and client, full NAT (port forwarding, netmapping), DNS relay, dynDNS support, NTP client and server, buffered real-time clock
Security	OpenVPN (client and server), IPsec, PPTP, firewall, 10 user for dial-in, authentication over PAP/CHAP/MS-CHAP/MS-CHAP 2, dial filter for dial-out
Redundancy	LAN ext port and external DSL modem, Cellular, RS-232 interface and external telephone modem, 2 SIM cards, 2 dial-out target, 2 OpenVPN server
Switch	
Ports	4+1 x RJ45 (4 wwitch ports + 1 LAN/ext.)
Operating mode	10/100 MBit/s for full/half duplex
Function	automatic recognition patch / crossover cable, automatic speed adjustment; MDI/MDI-X, port mirroring
Serial interface	serial Ethernet gateway (dail-in and dial-out connection, modem emulation)
Configuration	Web interface local and remote, text and binary file, automatic updates
I/Os	2 inputs to send sms or e-mail, establish dial-out connection, VPN tunnel 2 isolated outputs switchable with the configuration surface, time-steered, displays PPP connection, diplays VPN connection
Programming	User access to embedded Linux (Sandbox), 150 MB permanent file system, socket access, Sample images: e-mail- and SMS client, serial logger etc.
Messages	Hardware watchdog, system messages via e-mail, SMS and SNMP trays, SNMP V1/V2c/V3
Additional features	Update firmware and configuration (local und remote)
Electrical features	
Power supply	10...60 V DC
Power consumption	approx. 3 W (logged in), max. 6.5 W (during connection)
Physical features	
Size in mm	110 l x 70 w x 75 h
Operating temperature	-30...+55 °C -30...+60 °C under limited conditions (refer to www.insys-icom.com/restricted)

Product description	Features	Order number
MoRoS GPRS	GPRS/EDGE	10000205
MoRoS HSPA	GPRS/EDGE, 3G/HSDPA/HSUPA	10000212

Establish VPN connections the easy and secure way.

With the INSYS Connectivity Service!

www.insys-icom.com/connectivity

INSYS Connectivity

www.insys-icom.com