

i-modul GPRS 3.0 serial/Ethernet

i-modul EDGE 3.0 serial/Ethernet

Transmission technology	Design			
	DIN rail	Embedded module	Desktop device	MoRoS
3G/UMTS		●	●	●
2G/EDGE	●	●		●
GPRS	●	●	●	●
GSM	●	●		●
ADSL		●		
Ethernet	●	●		●
WLAN	●	●		
Bluetooth		●		
Analogue	●	●	●	●
ISDN	●	●	●	●

Embedded Cellular Radio Adapter

GPRS and EDGE extend the GSM network by packet-oriented services and offer substantial benefits for industrial applications.

1. Favorable accounting method by amount of data instead of connect time
2. High data rates up to 85 kbps (upload and download), for GPRS and up to 237 kbps for EDGE

Serial

The serial modem emulation adapter offers a serial interface (RS232) to the application, just like a conventional modem. Serial data is routed transparently through the cellular network. The serial adapter can establish a connection as callback after a call or an SMS. This also enables connections from the Internet into standard GPRS networks.

Ethernet Router

The Ethernet router offers network access with NAT, which enables a single Ethernet device or an entire LAN to be connected locally.



Embedded GPRS adapter with standard interfaces:

- serial modem emulation
- Ethernet router
- GPRS Class 12, EDGE Class 12
- Quadband for worldwide utilization
- Pin and size compatible to the i-modul series

GPRS is „Always On“

Replacement for modem

Benefits: Low fixed costs, calculable operating costs by volume, mobility

Dedicated wireless line

Frequent transfers of small amounts of data (e.g. readings)

Benefits: No delay due to connection setup, low costs

Centralized software update

Software distribution to several decentralized devices from one central station

Benefits: High data rate, parallel transmission, short overall time, low costs

Video monitoring

Benefits: Mobile, applicable anywhere, higher data rate than fixed network modem

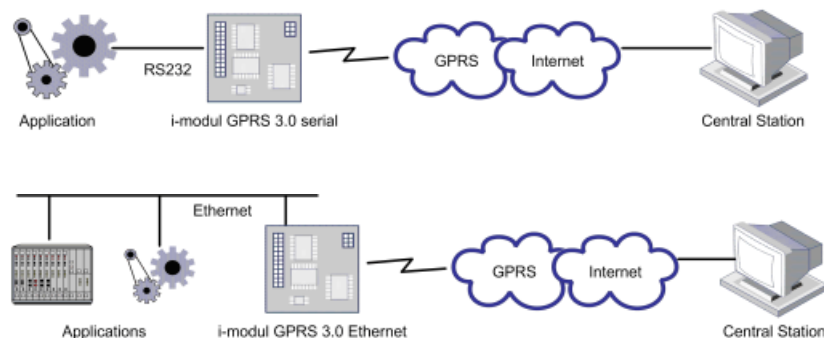
INSYS
MICROELECTRONICS GmbH
Waffnergasse 8
D-93047 Regensburg

Phone
+49 (0)9 41 - 56 00 61

Fax
+49 (0)9 41 - 56 34 71

E-Mail
insys@insys-tec.de

Internet
www.insys-tec.de



i-modul GPRS 3.0 serial/Ethernet

i-modul EDGE 3.0 serial/Ethernet

Technical data

	i-modul GPRS 3.0 serial i-modul EDGE 3.0 serial	i-modul GPRS 3.0 Ethernet i-modul EDGE 3.0 Ethernet
Function	serial gateway	Ethernet router with NAT
GSM/GPRS		
Standards	ETSI GSM Phase II/II+	
Frequencies	Quad band GSM (850/900/1800/1900 MHz)	
GPRS, EDGE	Multislot Class 12, Full PBCCH support, Mobile station Class B, Coding scheme 1-4; EDGE Class 12*	
GSM	CSD up to 14.4 kbps, incoming CSD priority enactable	
SMS	Fully supported	
Interfaces		
Functional	Asynchronous serial RS232, TTL	Ethernet 10BT
Data formats	8N1, 8E1, 8O1, 8N2, 7E1, 7O1, 7N2, 7E2, 7O2	
Flow control	Hardware (RTS/CTS), Software (XON/XOFF), or none	
Speed	300 to 115,200 bps	10 Mbps
Mechanical	Connector strip (2-row, 2mm pitch)	
GPRS connections		
Outgoing IP connections	Manually (dialing command), automatically (leased line, incl. alternative target), ring (incoming call), SMS command	on demand, NAT with timeout
Incoming IP connections	TCP/IP, TSC, IPT	Port forwarding
Configuration		
Local	AT commands	Web interface
Remote	AT commands via SMS, via CSD and TCP/IP connections	Web interface (if required to be deactivated)
Additional features	Firmware update, watchdog, virtual COM port driver	Firmware update, watchdog, dynDNS-Client
Digital I/Os	Query and set, SMS transmission (e. g. alarm) and activation of the input	Release of the LAN and WAN interfaces
Supply		
Voltage	5 VDC (±5%) via connector strip	
Current	200 mA (sleep), 450 mA (GSM/CSD), 700 mA (GPRS Class 10), 900 mA (GPRS Class 12) Average values over time for typical GSM field strength	
Physical Features		
Antenna connector	Hirose U.FL	
Operating temperature	-20...+65°C	

* EDGE version only

Product name	Features	Order number
i-modul GPRS 3.0 serial	serial interface	11-01-01-03-10.
i-modul GPRS 3.0b Ethernet	Ethernet interface	11-01-01-03-13.
i-modul EDGE 3.0 serial	serial interface	11-01-01-03-07.
i-modul EDGE 3.0b Ethernet	Ethernet interface	11-01-01-03-06.

INSYS
MICROELECTRONICS GmbH
Waffnergasse 8
D-93047 Regensburg

Phone
+49 (0)9 41 - 56 00 61

Fax
+49 (0)9 41 - 56 34 71

E-Mail
insys@insys-tec.de

Internet
www.insys-tec.de