Technical parameters

Radio parameters

Frequency bands	373.25 – 484 MHz
	Models: 373-402; 400-420; 417-447; 435-466; 462-484 MHz
Channel spacing	6.25 / 12.5 / 25 kHz
Frequency stability	+/- 1.0 ppm
Modulation	2CPFSK
RF Data rate	10.4 kbps / 25.0 kHz
	5.2 kbps / 12.5 kHz
	2.6 kbps / 6.25 kHz
FEC (Forward Error Correction)	No

Transmitter

Carrier Output power	0.5 or 2 W
Duty cycle	50%
Rx to Tx Time	< 1.5 ms

Receiver

Electrical

Primary power	10.8 - 30 VDC or PoE (38-57 VDC)
Rx	430 mA; 145 mA/48 V
Tx	0.5 W: 700 mA/13.8V; 230 mA/48 V
	2.0 W: 950 mA/13.8V; 310 mA/48 V
Sleep mode	No

better than -107 dBm

Interfaces

Ethernet	10/100 Base-T Auto MDI/MDIX RJ45
COM	RS232
	DB9F 300-115200 bps
Antenna	50 Ohms SMA female
LED panel	Power, Tx, Rx, ETH, 232, Status

Enviromental

Operating temperature	-25 to +55 °C
Humidity	5 to 95% non-condensing
Storage temperature	-35 to +85 °C

Mechanical

Casing	Hard aluminium
Dimensions	31 H x 96 W x 137 D mm
Weight	0.3 kg Mounting DIN rail, flat-bracket

SW

Operating modes	Bridge
Data integrity control	CRC 32
Encryption	No

Diagnostic and Management

Radio link testing

Ping + RSS

Approvals Radio

EMC (electromagnetic compatibility) Electrical Safety CE ETSI EN 300 113-1 V1.6.2 (2009-11) ETSI EN 301 489-1 V 1.6.1 EN 60950-1 ed.2 :2006



General

RE400 is the "easiest" radio modem in RACOM product range. It gets very close to being a true Plug-and-play device, as close as ever possible in private radio networks. The minimum settings necessary are all accessible from one simple web browser screen.

RE400 works as a standard IP network bridge, i.e. it is fully transparent. Every unit can serve as the central master or as a remote terminal and it can also simultaneously operate as a repeater.

The modern digital solution of the radio part (Software Defined Radio) of the RE400 radio modem allows for a wide frequency range a SW configurable channel spacing.

RE400

Transparent radio modem



400 MHz 6.25, 12.5, 25 kHz 11 kbps / 25 kHz 2W 1x ETH, 1x RS232 PoE or 10 – 30 V DC Transparent bridge Plug and play

Applications

- Polling type networks
- Water
- Oil & Gas
- Electricity
- Smart grid POS & ATM
- Lottery
- Weather



RE400

Fully transparent

- Y Standard IP network bridge functionality is implemented in the RE400 radio modem, i.e. the ETH interfaces of all the radiomodems in a network are interconnected according to bridge principles.
- When a COM interface is used, every frame received over a COM is simply broadcast to COM interfaces of all units in the network.

Security

- Y Licensed radio bands
- Y FEC, interleaving, proprietary data compression
- Y CRC32 data integrity control on Radio channel
- \ddot{Y} Password-protected access, https web interface

Reliability

- Y Every single unit tested in a climatic chamber as well as in real traffic
- Y Military or industrial components
- Y Industrial rugged die-cast aluminum case

Easy to configure and maintain

- Ÿ Web interface
- Y All configuration parameters within one page
- Ÿ Basic IP knowledge is sufficient
- Y CLI via SSH

Coverage

- ¥ 400 MHz band
- Y Line of sight is not required
- Y Carrier output power adjustable 0,5 or 2W
- Y Exceptional data sensitivity
- \ddot{Y} High resistance to multipath propagation and interference
- Y Any unit can work simultaneously as a repeater

Others

- Y Local and remote diagnostics
- Ÿ DIN rail mounting
- Ÿ L-bracket, flat-bracket, direct mounting
- Ÿ CE approval



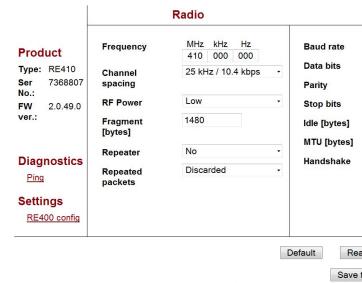




...the broadest narrowband money can buy



RE400



Open file: Bro

Transparent radio modem

ECONOMY RADIO MODEM

8 - Mask 255 255 255 0 None - GW 192 168 131 254 1 - 10 4000	RS232			Ethernet				
None • GW 192 168 131 254	9600	•	IP	192	168	131	232	
1 • • • • • • • • • • • • • • • • • • •	8	•	Mask	255	255	255	0	
10 4000 None •	None	•	GW	192	168	131	254	
1000 None •	1	•						
None	10							
	4000							
Save	None							
	file							