

INDUSTRIAL WIFI

240U-E Wireless Ethernet & Serial Device Server



The 240U-E provides reliable and secure high-speed wireless Ethernet connectivity across a broad range of applications in process and automation plants.

- **802.11b** compliant 2.4 GHz license-free, wireless data up to 11Mb/s
- Connects to PLC's, HMI, DCS, data acquisition, video devices and industrial PC's

Greater flexibility in one unit

Each module can be configured as a

<input checked="" type="checkbox"/> Access Point	<input checked="" type="checkbox"/> Bridge	<input checked="" type="checkbox"/> Serial Server
<input checked="" type="checkbox"/> Client/Station	<input checked="" type="checkbox"/> Router	<input checked="" type="checkbox"/> WDS Mesh Repeater

The 240U-E has an Ethernet port (10/100 BaseT) as well as two serial ports (RS232 and RS485) - up to three independent data-bus connections simultaneously.. Ethernet to Ethernet, serial to serial, serial to Ethernet, point to multi-point, Modbus serial to Modbus TCP conversion.

Industrial strength for industrial applications

The 240U-E has been designed and built for demanding industrial applications.

- **Reliable data transfer** in congested industrial environments - high RF power and receiver sensitivity
- **Industrial ratings**, -35 degC to 60 degC, humidity to 99% - designed for demanding applications
- **Secure data transfer**, military grade 128-bit AES encryption, plus commercial grade WEP encryption
- **Firewall protection** via message filtering at MAC and/or IP address level
- **Easy to use** configuration and powerful diagnostics via web-browser
- **Remote configuration** and diagnostics via the wireless link.

Long & short range applications, self-healing Mesh networking

- **High RF output** (100 or 300 mW) and superior receiver sensitivity gives excellent penetration in congested industrial environments, through buildings, factory walls and steelwork.
- **Wireless Distribution System** multi-repeater networks with self-healing mesh

Lifetime Warranty & first-class technical support

ELPRO's industry-first **Lifetime Warranty** with 24 hour telephone technical support means you can use the 240U-E with confidence.



240U-E 802.11b Wireless Ethernet

SPECIFICATIONS

Ethernet

10/100 BaseT RJ45, IEEE 802.3 compliant.
Bridge/router functions work with all Ethernet protocols
Embedded Protocols:
TCP/IP, UDP, ARP, PPP, ICMP, HTTP, FTP, TFTP, TELNET

Serial

RS232 V.24 DCE 1.2 to 115.2 Kb/s RS485 1.2 - 230 Kb/s

Discrete I/O

Input voltage-free contact / Output FET 30VDC 500mA
Used to transfer input to output status or communications
failure output.

Networking

Configurable as Access Point or Client, Bridge or Router
Point to point, Point to multi-point, user configurable addressing.
WDS AP Mesh functionality gives Multi-Repeater networking.
Address Filtering - whitelist or blacklist - MAC and/or IP.
Serial server functionality provides multiple connectivity modes -
serial to serial, serial to Ethernet, Modbus serial to Modbus TCP
and point to multi-point.

Wireless

2.400 - 2.484GHz Direct Sequence Spread Spectrum (DSSS),
13 selectable zones
802.11b compliant, auto rate selection 1-11Mb/s
Transmit power 100mW (20dBm) / 300mW (25dBm)
Receiver sensitivity < 8% FER -96dBm @ 1Mb/s
-91dBm @ 11Mb/s
Line-of-sight range 1km @ 100mW (Europe)
3 miles / 5km @ 300mW (America)
Range may be extended using repeater features.
Dual SMA coaxial antenna connectors for antenna diversity.

Security

Security encryption 40 and 104 bit WEP; plus WPA1 (TKIP) and
WPA2 (128/bit AES)
AP Mesh networking limited to WEP (WPA2 pending)
MAC/IP Address filtering Password protected configuration.

On-line Configuration and Diagnostics

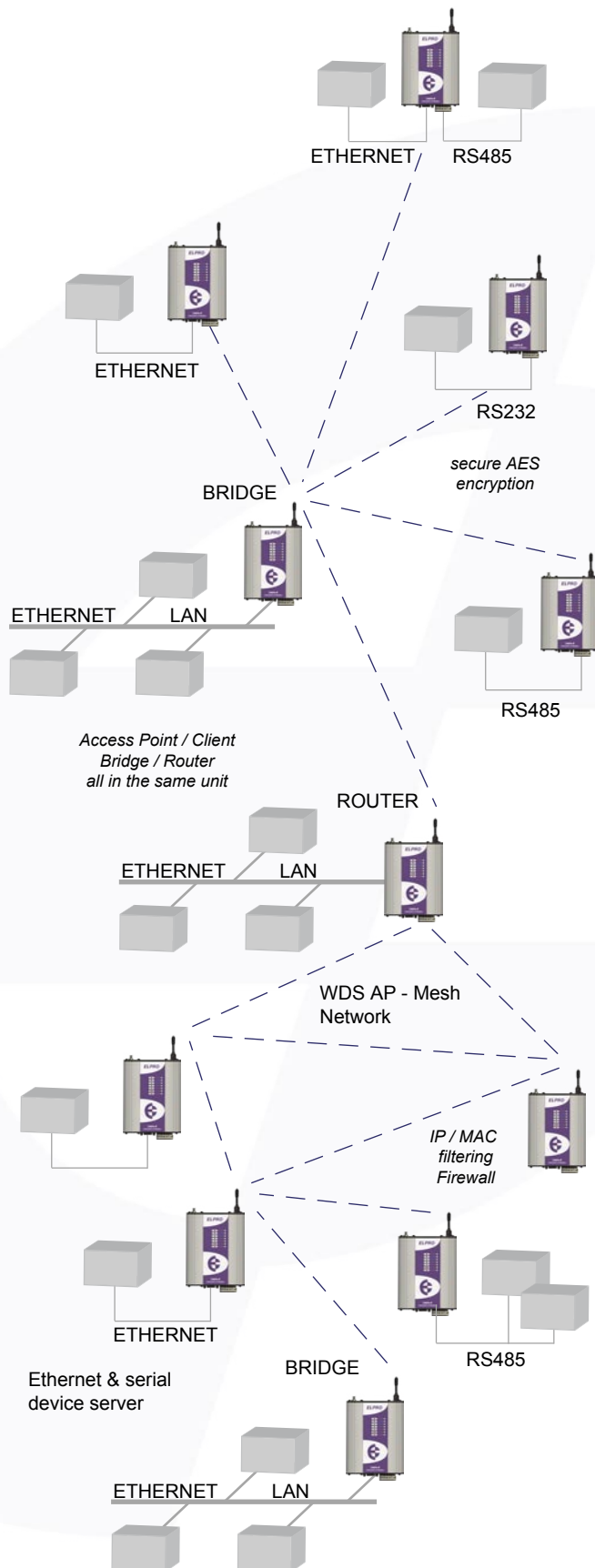
HTTP with remote configuration via wireless link
Web based system management - RF signal strength,
Bit Error Rate, connection monitoring and statistics
PPP Protocol Access to diagnostics
Firmware upgradeable via serial port

General

Temperature -30 to 140 degF / -35 to 60 degC
Humidity 99% non-condensing
Power Supply 9 - 30VDC
Current average 240mA (12VDC), 150mA (24VDC)
Case, heavy duty painted aluminum, DIN rail mounting
Size 4.5 x 5.5 x 1.2 in. / 114 x 140 x 30 mm
Weight < 1 lb / 0.5 kg
Indicators: Power/OK, Radio Rx and Tx, Radio Link, LAN Link/
Activity, Serial Activity, Digital I/O
Approvals FCC Part 15.247, CE ETS 300 328, RSS 210
Hazardous area CSA Class 1 Div 2, IEC 60950 (pending)

Ordering Details

240U-E-100 100mW RF Power
240U-E-300 300mW RF Power



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Specifications subject to change without notice