

Ethernet connectivity without the wiring

The 905U-E is an ideal solution for Ethernet and serial connections in process control and automation applications - PLCs, DCS, SCADA, data acquisition, wireless video ... the 905U-E can handle multiple applications simultaneously.

All in the same unit ...

Maximum flexibility, while saving expensive wiring costs. Each module can be configured as a

✓ Bridge ✓ Access Point Repeater

✓ Client/Station Serial server ✓ Router

10/100 BaseT Ethernet, wireless data up to 200 Kbits/sec ELPRO's proven Industrial Strength 900MHz FHSS technology with high immunity to interference

Long and short range applications ...

- range 60 miles (100km), license-free* repeater functionality increases wireless range even further
- excellent penetration in congested industrial environments - over 3000 feet (1 km) through buildings, factory walls and steelwork

Security, reliability, redundancy ...

- multiple layers of error-detection and correction
- automatic changeover to another Access Point if the wireless link fails
- military-grade AES security encryption of wireless data

Ethernet and Serial ...

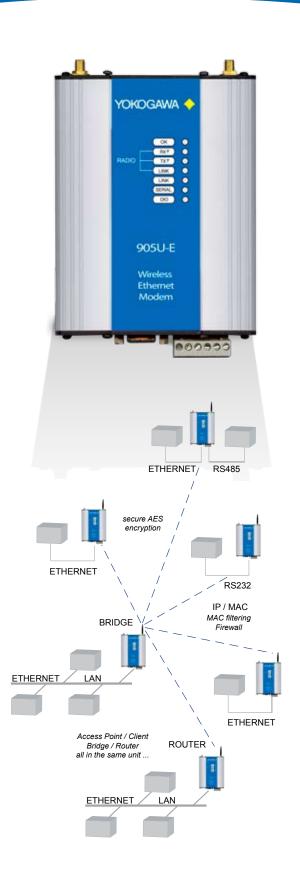
- three connection ports Ethernet and two serial interfaces, RS232 and RS485 - can be used simultaneously
- serial server functionality, serial to serial, serial to Ethernet, point to multi-point, Modbus serial to Modbus TCP
- discrete channel for status I/O, failure status or external status transfer

Firewall protection and efficient wireless management ...

- secure Firewall protection
- message filtering at MAC and/or IP address level

Easy to use configuration and powerful diagnostics ...

- · configuration and diagnostics via web-browser
- remote configuration and diagnostics via the wireless link



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 - 115.2 Kb/s, RS485 1.2 to 115.2 Kb/s

Serial server functionality provides multiple connectivity modes - serial to serial, serial to Ethernet, Modbus serial to Modbus TCP, and point to multipoint.

Discrete I/O

One I/O channel, 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-multipoint, user configurable addressing Repeater functionality

Address Filtering - whitelist or blacklist - MAC and / or IP address

Radio

Frequency hopping spread spectrum

Frequency bands

USA/Canada 902 - 928 MHz

Transmit power 0.1 - 1W (20 - 30 dBm) configurable

System gain 140 dB

Receiver sensitivity -108 dBm @ 10-6 BER

Data rates 19.2, 38.4, 100, 200 Kb/s or auto rate selection

Protocol CSMA/CA with 32 bit CRC and auto-correction

Radio range 60 miles / 100 km line-of-sight using high gain antennas

*(USA/Canada only with 4W ERP)

Range may be extended using repeater features

SMA coaxial antenna connection

Security

128 bit AES encryption or 64 bit proprietary encryption (configurable) MAC and / or IP filtering Password protected configuration

On-line Configuration and Diagnostics

HTTP with remote configuration via wireless link

RF signal strength, Bit Error Rate, connection monitoring and statistics

PPP Protocol Access to diagnostics

General

Temperature -40 to 140 degF, -40 to +60 degC

Humidity 99% non-condensing

Power Supply 10 - 30VDC

Current Normal 280mA (12V), 150mA (24V)

Transmit (1W) 500mA (12V), 300mA (24V)

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 < 0.8 lb / 0.4 kg

Indicators: Power/OK, Radio Rx and Tx, Radio Link, LAN Link/ Activity, Serial Activity, Digital I/O, LAN 10/100Mbit Link

Approvals FCC 15.247, RS210

Hazardous area CSA Class 1 Div 2 (pending)









VigilantPlant is Yokogawa's automation concept for safe, reliable, and profitable plant operations. VigilantPlant aims to enable an ongoing state of Operational Excellence where plant personnel are watchful and attentive, well-informed, and ready to take actions that optimize plant and business performance.

Yokogawa Corporation of America

North America

2 Dart Road, Newnan, GA 30265-1094, USA Phone: 800-258-2552 Fax: 770-254-0928

12530 West Airport Blvd., Sugar Land, TX 77478 Phone: 281-340-3800 Fax: 281-340-3838

Mexico

Urbina No. 18

Fracc. Parque Industrial Naucalpan

Naucalpan de Juarez, Estado de Mexico, CP 53489

Phone: (55) 5955-7400 Fax: (55) 5955-7417

Yokogawa Canada, Inc.

Bay 4, 11133 40th Street SE, Calgary, AB Canada T2C2Z4

Phone: 403-258-2681 Fax: 403-258-0182

http://www.yokogawa.com/us/

Represented by:

