



9469-ET

**Intrinsically Safe
Wireless
Access Point/Bridge**



- ◆ **Tri-Band operation**
- ◆ **Convert Ethernet device to wireless**
- ◆ **Zone 1 mountable in IP6x enclosure**
- ◆ **Multi-country roaming**
- ◆ **10/100Mbps Ethernet**
- ◆ **ATEX / IECEx certified**
- ◆ **FM / CSA approvals (pending)**
- ◆ **Wide temp. range -20°C to +60°C**
- ◆ **PoEx™ Power over IS Ethernet option**

The 9469-ET is a multi-functional module that can be used as an Access Point, Wireless Bridge (Client) or Wireless Repeater

When used in the Access Point (AP) mode, it allows wireless devices to connect through it and onto the wired Ethernet network, either in AD-HOC or Infrastructure modes.

When used as a Bridge, it makes it possible to turn any 10/100 Ethernet device into a wireless device, or to connect two network segments together to make a single network (without the interconnecting wire or fibre optic).

Additionally the module may also be used in its Wireless Repeater (WDS) mode to extend the range covered by a wireless network.

The 9469-ET is designed for Zone 1 hazardous-area mounting inside a suitable IP6x enclosure and has intrinsically safe ATEX and IECEx approvals with FM and CSA approvals pending. The approvals cover both surface industry and mining applications.

The unit may be powered by an intrinsically safe power supply or by Power over IS Ethernet (PoEx) providing intrinsically safe power and Ethernet communications over a single Cat5e cable.

The Tri-Band operation offers flexibility in situations where the 2.4GHz band may be overcrowded or where operation in the 5GHz and 5.4GHz bands is desired. Optional dual antennae also provide diversity improving wireless operation.

The intrinsically safe approval of the 9469-ET allows the use of a wider range of antennae that are classified as "simple apparatus". The ANT94 omnidirectional antenna (2.4GHz, 3dBi gain) is ideal for use where good general coverage is required.

Compliant with IEEE 802.11 a/b/g/h & Super AG standards, up to 108 Mbps data rate and provides security: WEP, WPA-PSK, WPA2-PSK and IEEE 802.1X (RADIUS).

Status LEDs are provided on the front panel for:

- 'Power On'
- WLAN 'Activity'
- Copper UTP 'Activity'
- Copper UTP '10/100Mb Link'

Configuration is straight forward with an easy to use web based application. The unit supports 802.11d (multi-country roaming) which allows the country to be selected during setup, ensuring the configuration complies with regulatory limits.

The module is supplied as a DIN-rail mounting device.

PoEx is a trademark of Controlled Systems Limited



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SPECIFICATION

See also System Specification

POWER INPUT

PoEx or separately powered

Input voltage

12V DC (10–12.8V)

Input current

270mA

Input protection

Fuse + supply reversal diode

IS ETHERNET

Intrinsically Safe 10/100 base T

Connector

RJ45

PoEx

Powered Device

WLAN

Standards

IEEE 802.11a/b/g/h

Frequency range

2.4 / 5 / 5.4GHz

Data Rate

up to 108Mbps (Super AG mode)

Modulation

OFDM: BPSK, QPSK, 16QAM, 64QAM, DSSS: DBPSK, DQPSK, CCK

Operating channels (802.11bg)

USA / Canada 1-11

Europe / Australia 1-13

Japan 1-14 (channel 14 for 802.11b only)

Security

64/128 bits WEP, WPA-PSK, WPA2-PSK, IEEE 802.11x (RADIUS) authentication, MAC address filtering, SSID broadcast control

Transmit power

+20dBm with TPC (100mW max)

RX Sensitivity

-92dBm for IEEE 802.11a/g

-95dBm for IEEE 802.11b

SOFTWARE

Administration

Web based management using any standard web browser (Internet Explorer, Netscape, Mozilla...), SNMP agent

SAFETY

Location of module

Zone 1, IIC T4 hazardous area
or Class 1, Div 2, Groups A, B, C, D T4 hazardous location*

Location of field wiring

Zone 0, IIC T4 hazardous area
or Class 1, Div 1, Groups A, B, C, D T4 hazardous location*

Ethernet protection

intrinsically safe

Certification Code

Ga Ex ia IIC T4

Ex iaD 20 T135°C

Ma Ex ia I

(Ta = -40°C to +60°C)

Safety description

See certificate

MECHANICAL

Mounting

DIN rail

Dimensions (mm)

Length 75

Width 100

Height (off rail) 116

Weight

1200 g

LED INDICATORS

	OFF	FLASH	ON
PWR (green)	Power fail	N/A	Power OK
WLAN (yellow)	Idle	Wireless LAN data activity	N/A
STAT (red)	AP mode = Normal status. Bridge mode = connection to AP is established	Bridge mode = attempting to connect to AP	Fault
ACT (yellow)	Ethernet link disconnected	Ethernet link activity	Ethernet link connected
100 (green)	Ethernet link set to 10Mbps	N/A	Ethernet link is 100Mbps

ENVIRONMENTAL

Ambient temp

Operating -20°C to + 60°C

(except where stated in individual module specifications)

Storage -20°C to + 60°C

Relative Humidity

5 to 95% RH (non-condensing)

Ingress Protection

IP20 to BS EN 60529

(Additional protection by means of enclosure)



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