

9479-ET(G)-CSL

CSL Intrinsicly Safe Gigabit Ethernet WLAN AP / Bridge

- **Intrinsicly Safe ATEX / UKEX / IECEx / North America (MET_{C/US}) approvals**
- **Dual Band 2.4GHz / 5GHz WLAN Support**
- **Access Point (AP) Mode**
- **or Client/Bridge Mode**
- **Dual Port Switch 10/100/1000Mbps LAN (daisy-chain capability)**
- **Compact dimensions (W: 42 x H: 160 x D: 140 mm)**
- **Ex ia IIB T4 Ga, Ex ia [ia Da] IIC T135° Db (non-mining) Ex ia I Ma (M1 mining).**
- **Ta = -40°C to +70°C**
- **Zone 1 / Zone 21 mounting (Zone 0 / Zone 20 with a suitable Ex ia Power Supply)**



The 9479-ET-CSL is an Intrinsicly Safe (IS) WLAN AP/Bridge Module suitable for Zone 1 / Zone 21 mounting, **(Zone 0 / Zone 20 with a suitable Ex ia Power Supply).**

It may be configured as either an AP or Client/Bridge. Also supporting either 2.4GHz or 5GHz operation further extends its range of applications.

There are 2x RJ45 (LAN) ports that support 10/100/1000 IS Ethernet connections – these can allow 'daisy-chaining' of units together.

Power (12V DC) is supplied to the module either locally or using **Power over Ethernet (PoEx)** from the LAN port-This requires the PoEx output to be wired to the Supply Input terminals by the user.

Note: PoEx not available on Gigabit versions

The compact and cost effective design makes it the ideal choice for many applications:

- | | |
|--------------------|--|
| Petrochem - | Process Monitoring, Galvanic Isolation etc. |
| Mining - | Underground Communication Links, Machine Monitoring etc. |

Electrical connections are via cage-clamp and/or screw type plug/socket terminals along with RJ45 type connectors for the Ethernet LAN ports. The antenna connections are SMA type

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June 2023

SPECIFICATION

Power supplies

12VDC IS Power Supply Input or PoEx™ (Power over IS Ethernet)
Typically 12V @ 300mA (Inrush < 200mA)
Ui = 15.4V
9492-PS-PLUS recommended

Ethernet

Intrinsically Safe 10/100/1000Base-T

Connector

RJ45 (x2)

Cable Length

Up to 100m Cat5e

PoEx

Powered Device

ANTENNA CONNECTIONS

Connector (Top Port MAIN, Bottom Port AUX)

SMA (MAIN)
SMA (AUX)

SAFETY

Location of Unit

Zone 1, IIBT4 hazardous area (9479-ETG)
Zone 1, IICT4 hazardous area (9479-ET)

Certification Code

Ex ia IIBT4 Ga (9479-ETG)
Ex ia IICT4 Ga (9479-ET)
Ex ia [ia Da] IICT135°C Db
Ex ia I Ma (M1 mining)
Ta = -40°C to +70°C

Certificate numbers

CML 19ATEX2414X
IECEX CML 19.0150X
IECEX ExTC 20.0019X (QLD)
CML 21UKEX21072X

See certificates for further information

ENVIRONMENTAL

Operating Temperature

-40°C...+70°C (full WLAN specification -20 to +60°C)

Storage Temperature

-40°C...+70°C

Humidity

0...95% RH, non-condensing

Ingress Protection

Select enclosure to suit application,
see certificates for information

MECHANICAL

| | |
|----------|----------|
| Width | 42mm |
| Height | 160mm |
| Depth | 140mm |
| Weight | 1500g |
| Mounting | Din Rail |

LED INDICATORS

| | OFF | FLASH | ON |
|-------------------|----------------------------|------------------------|-------------------------|
| PWR (green) | Power Fail | N/A | Power OK |
| WDG (green) | Fault | Green- Healthy (10Hz) | Fault |
| STAT (green) | Initialising or Fault | N/A | Healthy |
| RJ45 ACT (yellow) | Ethernet link disconnected | Ethernet link activity | Ethernet link connected |
| RJ45 1000 (green) | 10/100Mbps | N/A | 1000Mbps |
| WLAN ACT (blue) | No Link | Data | Linked |

WLAN

TX Output – 802.11n

2.4GHz: 18 to 20.5 dBm
5GHz: 15 to 18 dBm
(per antenna output in 2T/2R mode)

RX Sensitivity – 802.11n

2.4GHz: -92 to -73 dBm
5GHz: -96 to -72 dBm

Data Rates

802.11n : up to 300Mbps (2T/2R)
802.11a/h : 6 to 54Mbps
802.11b : 1 to 11Mbps
802.11g : 1 to 54Mbps

Security – AP Mode

WEP, WPA-PSK, WPA2-PSK, WPA/WPA2,
SSID visibility status

Security – Client/Bridge Mode

WEP, WPA-PSK, WPA2-PSK, WPA/WPA2,
AES/TKIP/WEP by hardware encryption

DATA & POWER TERMINALS

Power & External LEDs (CON1)

| Pin | Function | Pin | Function |
|-----|-----------------|-----|---------------|
| 1 | Power In +12V# | 2 | Power In 0V# |
| 3 | LAN1 PoEx +12V# | 4 | LAN1 PoEx 0V# |
| 5 | LAN2 PoEx +12V# | 6 | LAN2 PoEx 0V# |
| 7 | | 8 | |
| 9 | | 10 | |
| 11 | 0V | 12 | 0V |
| 13 | LAN1 LED | 14 | LAN2 LED |
| 15 | WLAN LED | 16 | |
| 17 | | 18 | |

-#Connect LAN1 OR LAN2 PoEx terminals to Power In terminals to use this function
- LEDS wire between LED terminal and 0V (no resistor required)

LAN (RJ45)

10/100/1000 BASE-T Ethernet

| Pin | 10/100 Function | Gigabit Function |
|-----|-----------------|------------------|
| 1 | Tx + | BI_DA+ |
| 2 | Tx- | BI_DA- |
| 3 | Rx + | BI_DB+ |
| 4 | PoEx +12V* | BI_DC+ |
| 5 | PoEx +12V* | BI_DC- |
| 6 | Rx- | BI_DB- |
| 7 | PoEx 0V* | BI_DD+ |
| 8 | PoEx 0V* | BI_DD- |

*PoEx not available on Gigabit ports

ORDERING INFORMATION

| Part Number | Description | Comments |
|---------------------|---------------------------------|-----------------------------------|
| 9479-ETG-CSL | Gigabit WLAN AP / Bridge | Standard |
| 9479-ET-CSL | WLAN AP / Bridge (10/100 PoEx) | Special Order (Subject to MOQ) |

Note: 2x Antenna required (not included) these need to be ordered separately

ACCESSORIES

| Part Number | Description |
|-------------------------------|---|
| ANTSMA94 | Antenna SMA Plug, length 150mm Gain, 3dBi |
| ANT94 | Antenna TNC Plug, length 150mm Gain, 3dBi |
| ANT94RA | Stubby Antenna TNC 90° Plug, length 80mm, Gain 2dBi |
| CSL-RG316-SMA-1000 | SMA Bulkhead Socket ⇔ SMA Plug, length 1000mm RG316 Cable Assembly |
| CSL-RG316-TNC-SMA-1000 | TNC Bulkhead Socket ⇔ SMA Plug, length 1000mm RG316 Cable Assembly |



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