

DY-G8042 POE+ Series High Efficiency / Secure



6 & 8 Port. POE+ 10/100/1000 (Gigabit), UnManaged Mini-Switch, Temperature Hardened

- * 4 X 10/100/1000 Mbps PSE (POE+) IEEE 802.3 af/at
- * 1 or 2 Uplink Ports - Copper / SFP, or Fiber
- * Rugged Design - IP40
- * Temperature Hardened: -40 ~ +85 Centigrade
- * UnManaged - Plug & Play
- * EMC Performance is Industrial Level 4
- * Security Queueing
- * Polarity Protection
- * Overload Current Protection
- * Alarm Relay contact (1A @ 24 Volts DC)
- * Redundant Dual Inputs
- * Up to 30 Watts Per Port - All PSE Ports
- * 5 Year Warranty



Product Overview

The DYMEC Industrial Ethernet POE+ Ethernet are 4 X 10/100/1000 TX (PSE) (Power-over-Ethernet Plus) unmanaged din rail switches. The switches will support IEEE 802.3 af or at compliant POE powered devices (PD). The output of the ports is a maximum 30 Watts per port. All four PSE ports can have the maximum wattage at the same time. (120 Watts Total). There is no limiting power budget to deal with.

This series product supports a variety of 1 & 2 port non-pse uplinks. The specific model will specify the appropriate uplink.

The G8042 POE+ series product is built with premium, Class 1, temperature hardened chip sets, for ultra-low latency, high throughput, and maximum power performance. Using Kyland-USA's DirectPower Design Technology, excessive heat dissipation problems are a thing of the past. Less heat lost in the switch means longer switch life and lower operational costs. We use less energy than our competition - providing a better value for customers.

This is the preferred switch for your Security, Telecomm or Transportation application. Our Security Queue Technology helps prevent unwanted intrusions to your network.

DYMEC - Innovative Industrial Products



Technical Specifications

Standard

IEEE 802.3, IEEE 802.3i, IEEE 802.3ab
IEEE 802.3u, IEEE 802.3x, IEEE 802.3z
IEEE 802.3af, IEEE 802.3at

Switch Properties

MAC Table: 2.5K
Packet Buffer: 1 M
Packet Forwarding Rate: 10 Gbps
Switching Delay: <4μs

Interface

Gigabit Ethernet Fiber Ports: 100/1000Base(X) / FC/ST/ST connector. Auto-MDI / MDI-X function, Full & Half Duplex
Gigabit Ethernet Copper Ports: 10/100/1000 BaseT(X) RJ-45

LED

LEDs on Front Panel:
Power LED: PWR1, PWR2
Interface LED: Link/ACT
POE LED: Amber, SW (Relay) Amber

Transmission Distance

Twisted Pair: 100m (Standard CAT5, CAT5e, Cat 6, Cat6e, network cable)
Multi Mode Fiber: 1310nm, 2km or (550M)
Single Mode Fiber: 1310nm, 40km/60km
1550nm, 60km/80 / 120km

Power Requirements

Power Input: POE+
48 volts DC POE (44-56Volts DC)

Power Consumption:
<5W (no PD), <123W (full load PD)

Overload Protection: Supported
Reverse Connection Protection: Supported

Physical Characteristics

Housing: Metal, fanless (convection cooled)
Protection Class: IP40
Dimensions (LxWxD): 142 x 43.0 x 105 mm
Weight: 0.55kg
Mounting: DIN-Rail or Wall / Panel mounting

Environmental Limits

Operating Temperature: -40 to 85°C (-40 to 185°F)
Storage Temperature: -40 to 85°C (-40 to 185°F)
Ambient Relative Humidity: 5 to 97% (non-condensing)

MTBF

512,320 hours (MIL-HDBK-217F) at 25 Degrees Centigrade

Warranty

5 years

Approvals

UL, CE, FCC, VCC

Industrial Standard

EMI:
FCC Part 15 Subpart B, (Class A), EN55022/CISPR22, Class A

EMS:
IEC61000-4-2 (ESD): ±8kV (contact), ±15kV (air)
IEC61000-4-3 (RS): 10V/m (80MHz-2GHz)
IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV
IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±2kV
IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz)
IEC61000-4-16 (Common mode conduction): 30V (cont.), 300V (1s)

Machinery:
IEC60068-2-6 (Vibration),
IEC60068-2-27 (Shock),
IEC60068-2-32 (Free Fall)

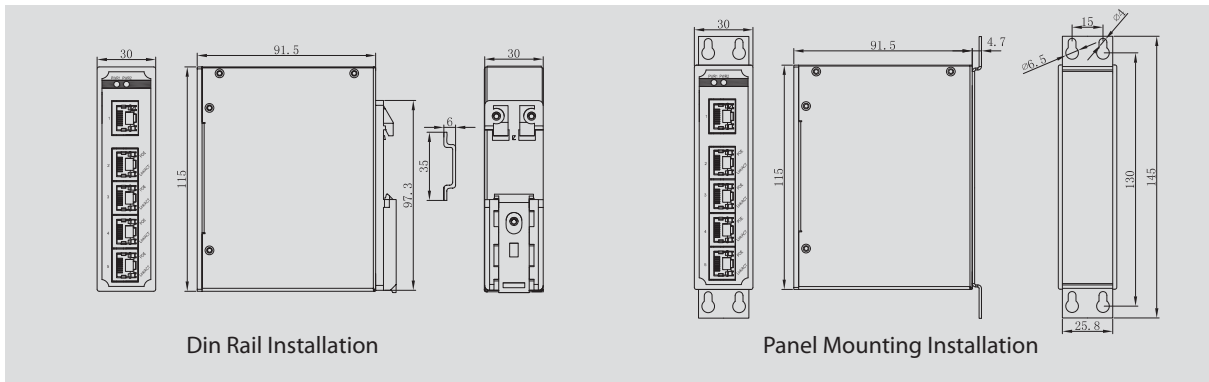
Industry: IEC61000-6-2
Railway: EN50155, EN50121-4



» Certificates

EN 55022 / 24	ITE Equipment
EN 50155	Railway / Railcar Applications, Electronic Equipment used on rolling stock
EN 55011	Industrial, Scientific, and Medical (ISM) equipment
EN 50121-3-2	Railway Applications, Electromagnetic Compatibility - Part 3-2: Rolling Stock - Apparatus
EN 50121-4	Railway Applications - Electromagnetic Compatibility - Part 4: Emissions & Immunity of the Signaling and Telecommunications Apparatus
Safety	IEC EN60950-1
EMC / EMS	CE, FCC, VCCI
EMI	FCC Part 15, Subpart B, Class A : CE EN 55022 Class A
EN 50155 / EN 60068-2-6	Vibration
EN 50155 / EN 60068-2-27	Shock
EN 50155 / EN 60068-2-32	Free Fall
IEEE1613	Power Utility / Substation
NEMA TS-2	Traffic Control / Outdoor
EnergyStar	

➤ Mechanical Drawing



➤ Product Ordering Information

DYMEC G8042 Series: UnManaged Gigabit POE+ (30 Watt)

Fiber Connector Types:

SC= SC Connector

ST= ST Connector

FC= FC Connector

Available Models:

- DY-G8041C:** 5 Port, Gigabit 10/100/1000 Mbps POE+ Industrial Ethernet Switch (UnManaged)
4 X 10/100/1000BaseT(X) / RJ45 PSE (POE+), & 1 X 10/100/1000BaseT(X) / SFP/RJ45
Combo Port, Dual Redundant DC power inputs with Alarm Relay (1A @ 24 Volts DC)
- DY-G8042CF:** 6 Port, Gigabit 10/100/1000 Mbps POE+ Industrial Ethernet Switch (UnManaged)
4 X 10/100/1000T(X) / RJ45 PSE (POE+), & 2 X 10/100/1000BaseT(& X) / SFP/RJ45
Combo Port, Dual Redundant DC power inputs with Alarm Relay (1A @ 24 Volts DC)
- DY-G8042F:** 6 Port, Gigabit 10/100/1000 Mbps POE+ Industrial Ethernet Switch (UnManaged)
4 X 10/100/1000BaseT(X) / RJ45 PSE (POE+), & 2 X 100/1000Base(X) SFP
Dual Redundant DC power inputs with Alarm Relay (1A @ 24 Volts DC)
- DY-G8042TF:** 6 Port, Gigabit 10/100/1000 Mbps POE+ Industrial Ethernet Switch (UnManaged)
4 X 10/100/1000BaseT(X) / RJ45 PSE (POE+), & 1 X 100/1000 Mbps SFP Port
1 X 10/100/1000BaseT(X) RJ45
Dual Redundant DC power inputs with Alarm Relay (1A @ 24 Volts DC)
- DY-G8041C-12:** 5 Port, Gigabit 10/100/1000 Mbps POE+ Industrial Ethernet Switch (UnManaged)
4 X 10/100/1000BaseT(X) / RJ45 PSE (POE+), & 1 X 10/100/1000 Mbps TX/SFP
Combo Port, Dual Redundant DC power inputs with Alarm Relay (1A @ 24 Volts DC)
- DY-G8042CF-12** 6 Port, Gigabit 10/100/1000 Mbps POE+ Industrial Ethernet Switch (UnManaged)
4 X 10/100/1000BaseT(X) / RJ45 PSE (POE+), & 1 X 100/1000 Mbps SFP Port &
1 X 10/100/1000BaseT(X) / RJ45
Dual Redundant DC power inputs with Alarm Relay (1A @ 24 Volts DC)
- DY-G8042F-12:** 6 Port, Gigabit 10/100/1000 Mbps POE+ Industrial Ethernet Switch (UnManaged)
4 X 10/100/1000BaseT(X) / RJ45 PSE (POE+), &
2 X 100/1000Base(X) / SFP
Dual Redundant DC power inputs with Alarm Relay (1A @ 24 Volts DC)

» Additional DY-G8080 Series: 8 Port with POE+



» Product Ordering Information

DYMEC G8080 Series: UnManaged 8 Port Gigabit with POE+ / non-POE

Available Models:

- DY-G8042TF-12:** 6 Port, Gigabit 10/100/1000 Mbps POE+ Industrial Ethernet Switch (UnManaged)
4 X 10/100/1000BaseT(X) / RJ45 PSE (POE+)
1 X 10/100/1000BaseT(X)
1X 100/1000Base(X) SFP
Dual Redundant DC power inputs with Alarm Relay (1A @ 24 Volts DC)
- DY-G8080-4P:** 8 Port 10/100/1000 Mbps POE+ Industrial Ethernet Switch (UnManaged)
4 X 10/100T(X) / RJ45 PSE (POE+), & 4 X 10/100BaseT(X) / RJ45
Dual Redundant DC power inputs with Alarm Relay (1A @ 24 Volts DC)
- DY-G9080:** 8 Port 10/100/1000 Mbps POE+ Industrial Ethernet Switch (UnManaged)
8 X 10/100BaseT(X) / RJ45 PSE (POE+)
Dual Redundant DC power inputs with Alarm Relay (1A @ 24 Volts DC)