

eCopper™ HPoE

The image shows a black, rectangular PoE injector. On the front panel, there is a green Ethernet port labeled 'LINK' and '1000BASE-T'. To its right is a temperature gauge labeled 'T'. Further right is a DC12V output terminal labeled 'DC12V Output' with '+ -' polarity markings. The device is designed for industrial or outdoor use, as indicated by its rugged appearance and the 'IP30' rating on the top.

- Ethernet over coax communication following the IEEE1901 standard
- 802.3af/802.3at/802.3bt compliant
- Supports PoE++ (up to 90W) and Power over Coax
- Coax data rate >50Mbps (800m) based on coax quality
- Powered by PoC from headend: EECF1-GN1-R-MN-B
- 12VDC 2-pin terminal output providing power to external devices at the transmitter unit
- Unique PoC transmission protection design, including surge and lightning protection

The diagram illustrates a PoE+ system architecture with two parallel camera channels. Each channel consists of a camera connected to an EECF1-GS1-T-MN-B Transmitter via PoE+ or PoE++. The Transmitter is connected to an EECF1-GN1-R-MN-B Receiver via Coax with EoC & PoC. The Receiver then connects to a switch (KBC ESMGS24-P4 or similar) via Data (PoE+ or PoE++). The switch is also connected to a VMS and PoC Control computer and an NVR. A 52~57VDC power source is connected to the bottom receiver.

Specifications

Standards

IEEE Standard

IEEE 802.3 10BASE-T
IEEE 802.3u 100BASE-TX
IEEE 802.3ab: 1000BASE-T
IEEE 802.3x full-duplex
IEEE1901

Power

Receiver Input Option 1:
Receiver Input Option 2:
Power Consumption

52-57VDC, 100W PSU⁽³⁾
PoE+ or PoE++ Source
≤2W (Without PoC)

LAN Port

Data Rate

10/100/1000Mbps Auto-sensing
Half & Full-duplex

Environmental

Operating Temperature
Storage Temperature
Operating Humidity
Mean Time Between Failure (MTBF)

-20° ~ +70° C
-40° ~ +85° C
0 to 95% non-condensing
> 100,000 Hours

PoE

Standard
PSE Type
PoE Power Output

802.3af/at/bt
End-span
Up to 90 watts max.

Mechanical

Dimensions (L x W x H)
Mount

104mm x 74mm x 33mm
Metal clip mount

Coax Port

Cable
Data Rate ⁽¹⁾
Maximum PoE Distance ⁽²⁾
Maximum PoE+ Distance ⁽²⁾
Maximum PoE++ Distance ⁽²⁾

Coaxial Cable (75Ω)
>50Mbps (800m)
500m(15W@RG6)
300m(30W@RG6)
100m(60W@RG6)

Connectors

Ethernet
Coax

RJ45
BNC

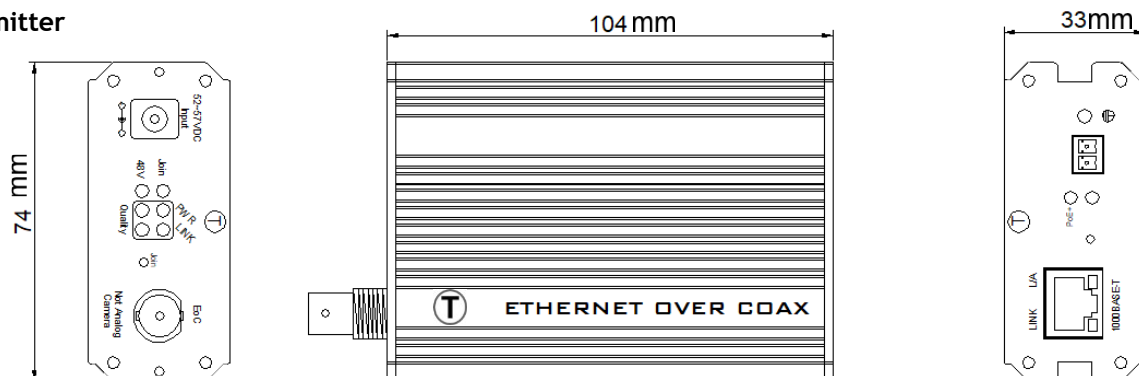
Protection

Surge

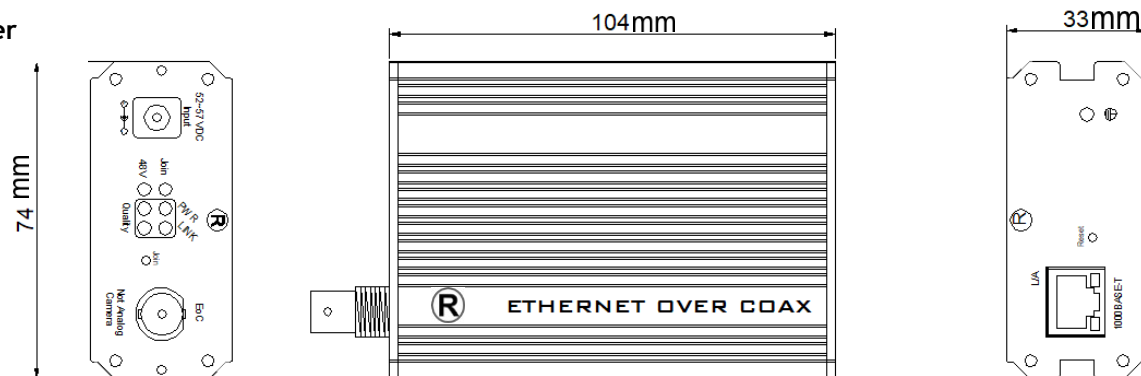
Coax: 6kV; Ethernet: 2kV

Dimensions

Transmitter



Receiver



Part Numbers

Transmitter: **EECF1-GS1-T-MN-B**

Receiver: **EECF1-GN1-R-MN-B**

(1) The data is based on RG6 and is related to coax quality.

(2) The data is based on the RG6 test; it relates to coax quality and the applied voltage (52-57VDC) at the receiver end.

(3) Power supply sold separately.

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