POWER OVER ETHERNET (PoE)

Device

Power over Ethernet (PoE) is a technology that allows network cables to carry electrical power along with data to remote devices. This is particularly useful for devices that need both power and a network connection, such as IP cameras, wireless access points, VoIP phones, and other networked devices.

PoE Categories
- **AC PoE**
- **DC PoE**

Types of PoE
- **PoE Injector**
- **PoE Extender**
- **PoE Splitter**

PoE Injector:

A PoE (Power over Ethernet) injector is a device that adds power to an Ethernet cable, allowing it to transmit both data and electrical power to a PoE-enabled device. This is particularly useful when you have a non-PoE switch or router but need to power PoE devices like IP cameras, wireless access points, or VoIP phones.

PoE Extender

A PoE (Power over Ethernet) extender is a device that amplifies the distance over which both power and data can be transmitted via an Ethernet cable. Standard PoE solutions typically support distances of up to 100 meters (328 feet). PoE extenders are used to surpass this limit, allowing network and power signals to reach devices that are farther away without needing additional power sources or network infrastructure changes.

PoE Splitter

A PoE (Power over Ethernet) splitter is a device that separates the data and power transmitted over a single Ethernet cable into two separate outputs: one for data and one for power. This allows non-PoE devices to be powered using PoE, which is especially useful for devices that require power but don't natively support PoE.

DATASHEET
Model: CBDP24151

POE - CBDP24151- PoE Injector CBDP24151 is a device. No need to buy a PoE switch, you can use the existing non-PoE switch or non-PoE router to connect PoE devices with the help of PoE devices. The main purpose of CBDP24151 is to provide PoE to outdoor telecom products such as Access Point, Radio etc. It is compliant with the EMI/EMC.	JSD electronics

POE Injector	Product Images

Model No	POE - CBDP24151

Features

24V /15W PoE Injector .
Cost Saving, no power cabling for Ethernet network device .
Delivers power and data over the single cable up to 100 Meter .
Compliant with IEEE802.3af/at Standard
Over current , Over voltage and short circuit protection .
Plug & Play installation, requires no configuration .
Use 4 pairs of power supply.
Support POE power up to 15W.
Indoor IP55 housing .

Technical Specification

Ports	1 10/100/1000Mbps Auto-Negotiation RJ45 LAN port PoE port (POWER+DATA OUT) 1 power socket (DC IN) EIA/TIA-568 100 STP (maximum 100m).
POE Standard	IEEE802.3af/at
PSE Power on RJ-45	DATA PAIR : 1/2 (+) , 3/6 (-) , 4/5 (+) , 7/8 (-)
POE Power Output	15W Max
Input Voltage	DC 38V - 56V
Input Current	0.31 Amp to 0.46 Amp @ 38V (Full Load)
Leakage Current	5mA(Max)DC 24V(Full Load)
Mechanical Characteristics	Length: 105.1mm (4.13in.) Height: 30.5mm (1.20in.) Width: 53.1mm (2.09in.) Weight: 0.11Kg (3.88oz.)

No-Load Output Voltage	DC24V±1%,(No-Load)
Output Voltage	DC24V±1%,(Full Load)
Output current	0.625A Max
output ripple voltage	≤200mV,Test conditions: rated input voltage, full load output, Tested with 20MHz bandwidth oscilloscope.
Efficiency	≥85%,@56V DC (Full Load)
Operation Temperature	0℃~40℃
Storage Temperature	-40℃~70℃
Operation Humidity	10%~90% RH non-condensing
Storage Humidity	5%~90% RH non-condensing
LED Indicator	PWR(Red)
Network Media(Cable)	10BASE-T: UTP category 3, 5 cable (≤100m) 100BASE-TX: UTP category 5,5e cable (≤100m) 1000BASE-T: UTP category 5e,6 cable(≤100m)
Surge Protection	Differential mode±1KV， Common mode ±2KV
Electrostatic Standard	Contact ±6KV, Air ±8KV
Certification	CE,FCC,ETL,CB,ITS GS,UKCA,RCM,SAA
MTBF	>50000 hours

PoE ASSEMBLY (CBDCA01)

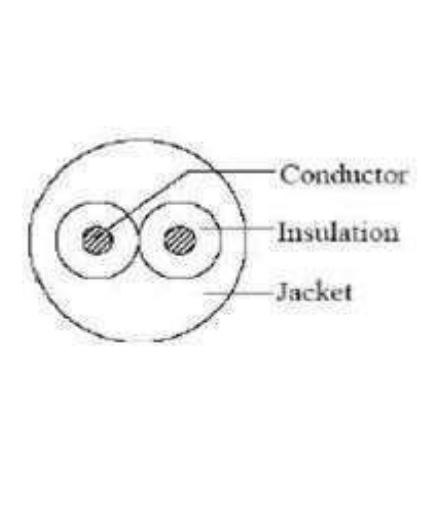| PoE Assembly	Model No	POE – CBDP24151
Part List/Items	**Description**	**Dimension**
PoE Enclosure	PoE Enclosure	H(66.85)*W(165.96)*L(159.95)MM
DC PoE with surge protector	DC PoE with surge protector	1PC,DC 220V Input
Anchor fastener with fisher plugs	Anchor fastener with fisher plugs	4 set
Metllic strap-SS304 for pole mount	Metllic strap-SS304 for pole mount	2pcs
Gland	Gland	3pcs
Power cable 2C*2 swmm,5M	Power cable 2C*2 swmm,5M	1pc,2*14AWG

PoE ENCLOSURE	Description	Device Picture
Material	PC	
Ref.Dimension	H(66.85)*W(165.96)*L(159.95)MM	
IP Protection	IP 65	
RoHS	Compliant	
Accessories	Mounting bracket ,Anchor-fish-screw 4set	

DC PoE with surge Protector	Description	Device Image
Input Voltage	DC 38V-56V	
Output Voltage	DC24V (+/-1%)Full Load	
Output current	0.625A Max	
Input/output port	1 DC Power terminal	
	1 Port for Ethernet ,RJ45	
	1 port for PoE,RJ45	
Lightning protest	Standard according to EN61000-4-5	
Differential Mode standard	L-N,2KV	
Common Mode standard	L-PE,2KV	
	N-PE,2KV	
	LN-PE,2KV	
RoHS	Compliant	

Anchor fastener with fisher plugs	Anchor set M6*40-SS-P	
Material	SUS304	
Dimension	M6*40MM	
RoHS	Compliant	

Power Gland	RLGL-M22-14BK-IN	
Range	6-14MM	
Flame resistance	UL94V2	
waterproof	IP68	
RoHS	Compliant	

Stainless Steel Strap	SLHC02-50-200	
Range	50-200MM	
Material	SUS304	
RoHS	Compliant	

Power Cable 2C*c Sqmm,5M	SL2C14AWG-5000-IN	
Conduct	2*14AWG	
Insulation	FR PVC	
Jacket	FR PVC	
Nom.OD	8.9+/-0.2mm	
Rating Voltage	300v	
Operating temp.	15'C to +70'C	
RoHS	Compliant	