

PD-4250

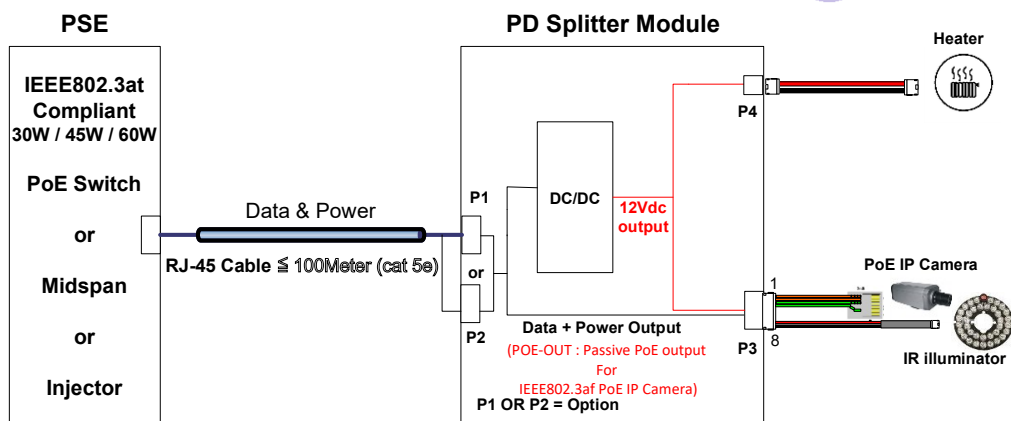
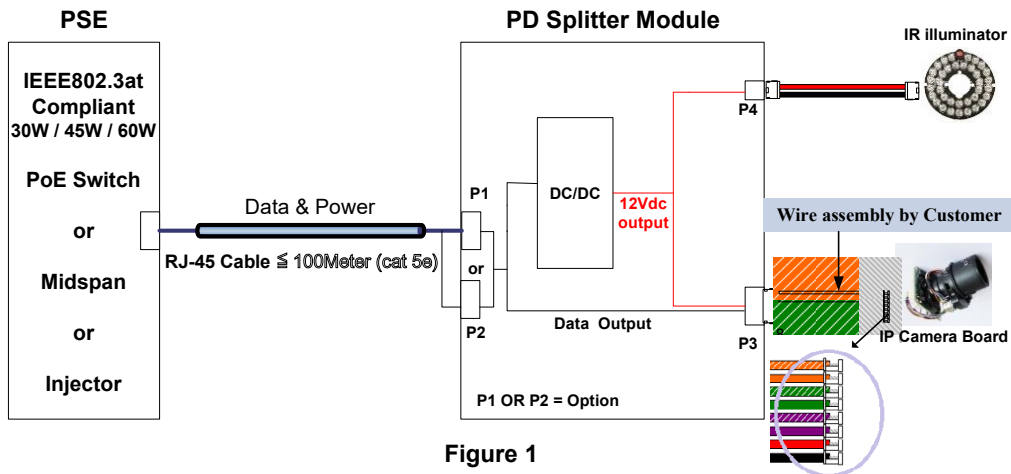
IEEE 802.3at PoE PD Splitter Module Series



Product Selector

Product Number	P1 Connector Type	P3 1/2,3/6 Data + Power	Product Size (L x W x H)	Ref
PD-4250-V	180° RJ-45	Data Only	42x50x20.8 mm	
PD-4250-V-P	180° RJ-45	Y	42x50x20.8 mm	
PD-4250-H	90° RJ-45	Data Only	42x50x19.2 mm	
PD-4250-H-P	90° RJ-45	Y	42x50x19.2 mm	
PD-4250-N	NO RJ-45	Data Only	42x50x19.2 mm	
PD-4250-N-P	NO RJ-45	Y	42x50x19.2 mm	

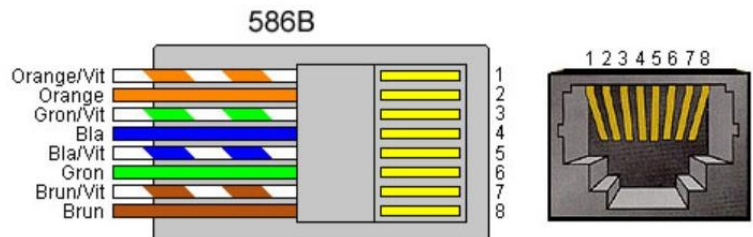
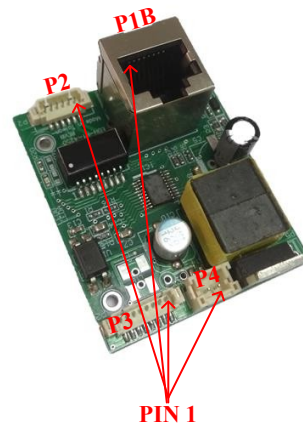
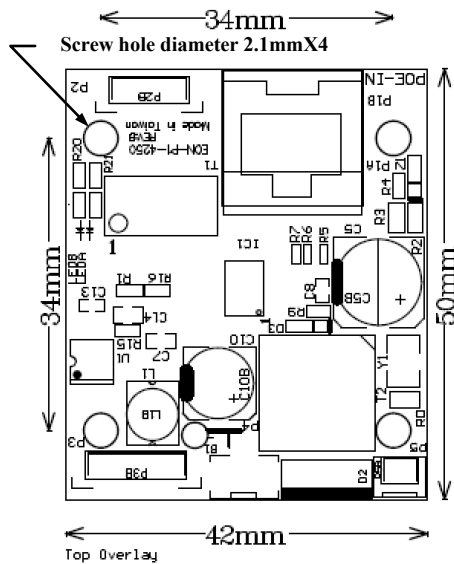
Functional Connection



Features

- ◆ Peak 30W high-power PoE PD Splitter, Compliant with IEEE 802.3at standard
- ◆ Design for meets 10/100 BASE-T
- ◆ Built-in dual-channel bridge rectifier, directly supporting end-point and mid-span modes
- ◆ Use 30W/45W/60W Injector or Midspan or PoE Switch , the Splitter support total 30W output.
(@ P1 RJ-45 Connector V_{PoE IN}=56Vdc)
- ◆ Over-temperature Protection
- ◆ High Efficiency, Easy installation
- ◆ 2 year warranty(Limited)

PCB size and connectors placement



Connector definition

Connector	PIN1	PIN2	PIN3	PIN4	PIN5	PIN6	PIN7	PIN8
P1	RJ45 for 586B							
P1 (definition)	POE-IN: Power + Data input from 30W / 45W / 60W IEEE802.3at compliant Midspan or Injector or PoE Switch							
P2 (Pitch:1.25mm)	1	2	3	6	L1	L2		
P2 (definition)	POE-IN: Power + Data input from 30W IEEE802.3at compliant Midspan or Injector or PoE Switch				Indicator light A	Indicator light B		
P3 (Pitch:1.25mm)	1	2	3	6	L1	L2	12V	GND
P3 (definition)	Tx Data + Signal line 1	Tx Data – Signal line 2	Rx Data + Signal line 3	Rx Data – Signal line 6	Indicator light A	Indicator light B	PoE 12V+	PoE 12V-
P4 (Pitch:2.0mm)	12V	GND						
P4 (definition)	PoE 12V+	PoE 12V-						

Electrical Characteristics (Recommended Operating Conditions)

Parameter	Symbol	Min	Typ	Max	Units
PoE Input Voltage(@P1) @24Watt Output	V _{INPOE}	42	50	56	Vdc
PoE Input Under Voltage Lockout (@Minimum load)	V _{LOCK}	31		33	Vdc
Operating Enclosure Ambient Temperature	T _{OP}	-40	25	50	Ta/°C
Storage Temperature	T _{ST}	0	25	75	Ta/°C

DC Electrical Characteristics($T_a=25^{\circ}\text{C}$)

DC Characteristic	Symbol	Min	Typ	Max	Units	Test Conditions
Output Voltage (@P4 Terminal)	V_{OUT}	11.75	12.0	12.25	Vdc	IEEE802.3at Compliant 45/60W Midspan or Injector Input $V_{INPoE}=55\text{Vdc}$ Power Output @max load
12Vdc Total output Current (P3+P4)	I_{OUTMAX}		2.0	2.5 (NOTE 1)	Amp	
12Vdc Total output power (P3+P4)	Power		24	30 (NOTE 1)	Watt	
Line Regulation	V_{LINE}		0.1	0.2	%	$V_{INPoE}=42\sim 55\text{Vdc}$ @ I_{OUTMAX}
Load Regulation	V_{LOAD}		0.3	0.5	%	$V_{INPoE}=55\text{Vdc}$ @20%~90% max load
Output Ripple and Noise	V_{RN}		150	200	mV _{p-p}	$V_{INPoE}=55\text{Vdc}$ @50% max load (NOTE 2)
Efficiency	η	84	86	87	%	$V_{INPoE}=55\text{Vdc}$ @50% max load
Minimum Load	R_{LOAD}		40		mA	Input to Output

Note 1: $T_a \leq 10^{\circ}\text{C}$

Note 2: Ripple & Noise bandwidth is from DC to 20Mhz. Terminated with a 47uF Aluminum electrolytic capacitor parallel with a 0.1uF Ceramic capacitor.

Operating temperature range :

