

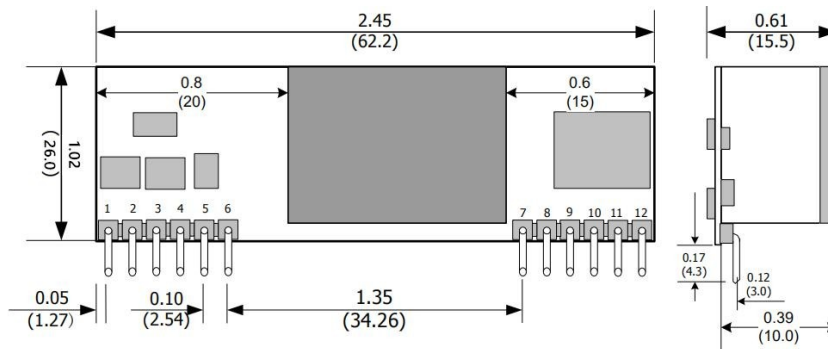
DESCRIPTION

12V, 30W PD(Powered Device) Integrated Module (Isolation Type)

FEATURES

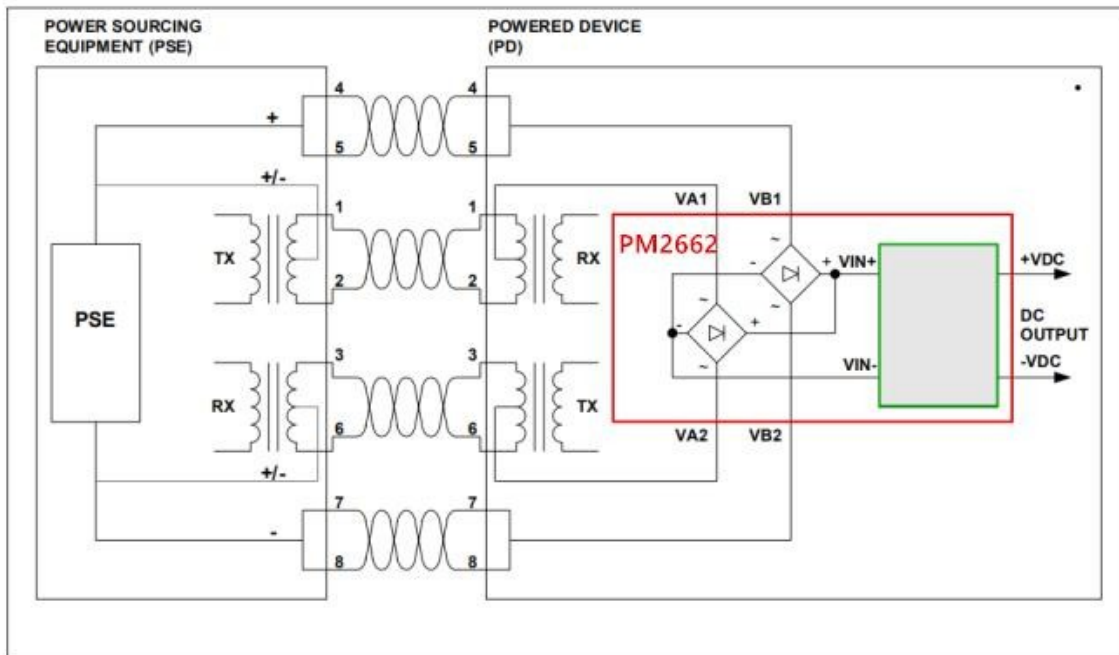
- Fully supports IEEE802.3af/at
- Input Voltage Range 37V to 57V
- Support PoE applications in both of Fast / Gigabit Ethernet environments.
- Short Circuit Protection
- Over-temperature Protection
- Programmable Classification (Default:Class 4)
- High Efficiency
- Isolation level 1.5KVrms.
- Easy Installation and Low Cost (Isolation Type, Minimum External Devices required)
- Low Output Ripple and Noise
- Adjustable Output Voltage
- 1500Vrms Isolation (Input-Output)
- You can choose straight needle or curved needle

PIN ASSIGNMENT



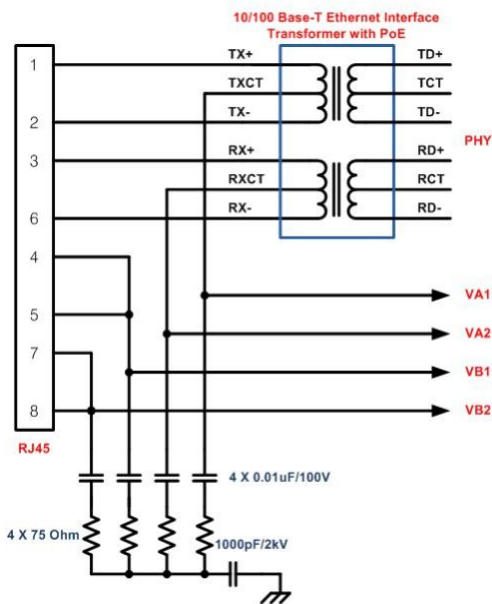
Pin #	Name	Description
1	VA1	Input (1). This input pin connects to the centre tap of the transformer connected to pins 1&2 of the RJ45 connector. It is not polarity sensitive.
2	VA2	Input (2). This input pin connects to the centre tap of the transformer connected to pins 3&6 of the RJ45 connector. It is not polarity sensitive.
3	VB1	Direct Input (1). This input pin connects to pin 4&5 of the RJ45 connector(or centretap of 4&5). It is not polarity sensitive.
4	VB2	Direct Input (2). This input pin connects to pin 7&8 of the RJ45 connector(or centretap of 7&8). It is not polarity sensitive.
5, 6	NC	Do Not Connect.
7, 8	-VDC	Negative DC Output. This pin provides the -VDC output.
9, 10	+VDC	Positive DC Output. This pin provides the +VDC output.
11	ADJ	Do Not Connect.
12	NC	Do Not Connect.

Typical System Diagram

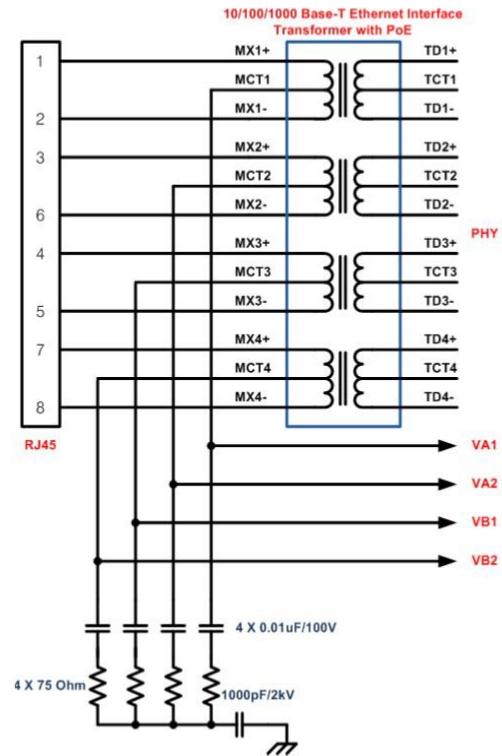


Typical Application

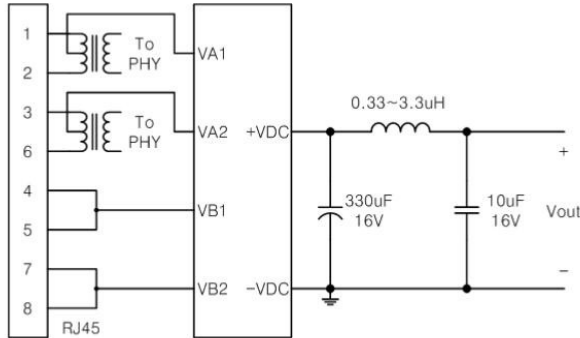
10/100 Base-T APPLICATION



10/100/1000 Base-T APPLICATION



OPTIONAL EXTERNAL LC FILTER FOR LOWER RIPPLE AND NOISE



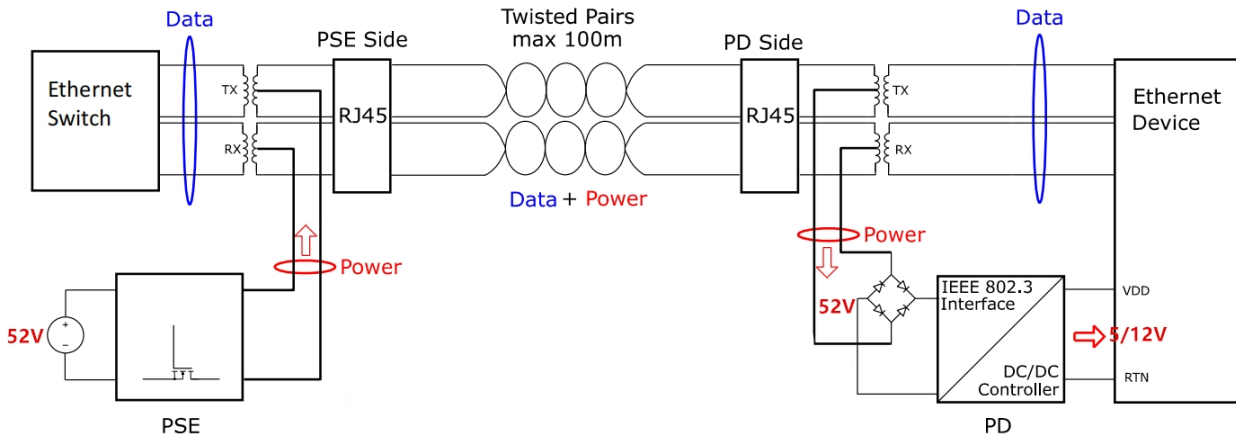
ELECTRICAL SPECIFICATIONS

No	Item	Specification
1	Input Voltage	37~57V
2	Output Voltage	12V Typ.
3	Output Current (Vin=56V)	2.5A Max.
4	Line Regulation	5%
5	Load Regulation	5%
6	Efficiency	92% max.
7	Input to Output Isolation	1500 Vrms
8	Type of DC/DC Converter	Flyback Type
9	Operating Temperature	-48 ~ +85°C

Model	Input Voltage (Behind bridge)	Input Current	Output Voltage	Output Current	Efficiency	Ripple Output Noise
	V	mA	V	A	%	mV
PM2662	50	672	12.2	2.5	90.77%	
	50.1	531	12.2	2	91.72%	310
	50.2	394	12.2	1.5	92.52%	230
	50.3	262	12.2	1	92.57%	180
	50.4	133	12.2	0.5	91.00%	
	50.5	10	12.2	0.024	57.98%	
	50.5	4	12.2	0	0.00%	

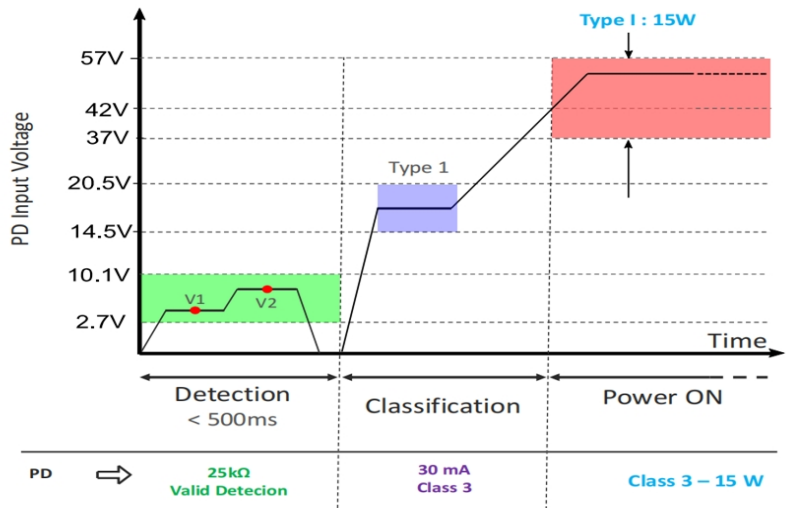
1. Add 330uf / 16V capacitance at the output, This will reduce the ripple and noise to typically 150mVp-p.
2. Minimum load required to be greater than 24mA.

1. Power Delivery in PoE Systems

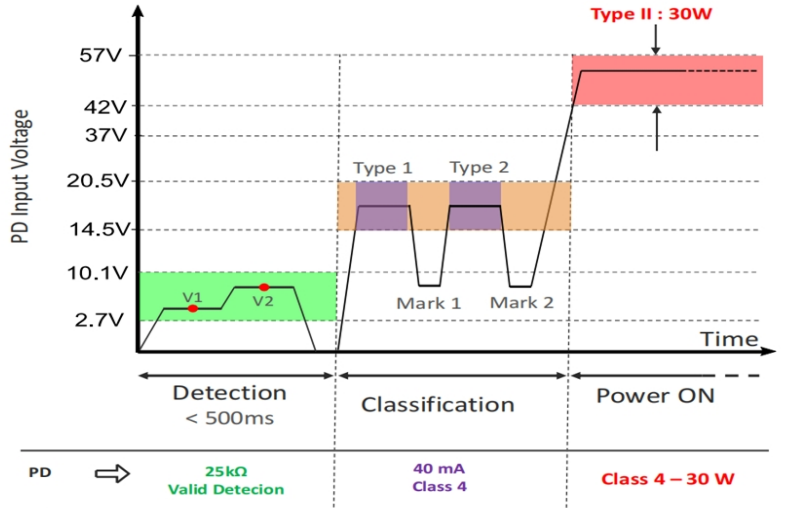


	Type 1 802.3af			Type 2 802.3at	Type 3 802.3bt		Type 4 802.3bt	
Power Class	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8
Power from PSE	4 W	7 W	15.4 W	30 W	45 W	60 W	75 W	90 W
Power delivered to PD	3.84 W	6.49 W	13 W	25.5 W	40 W	51 W	62 W	71.3 W

2. Establishing PoE Connection – Type 1 (IEEE 802.3af/PoE)



3. Establishing PoE Connection – Type 2 (IEEE 802.3at/PoE+)



4. Establishing PoE Connection – Type 3 and 4 (IEEE 802.3bt)

