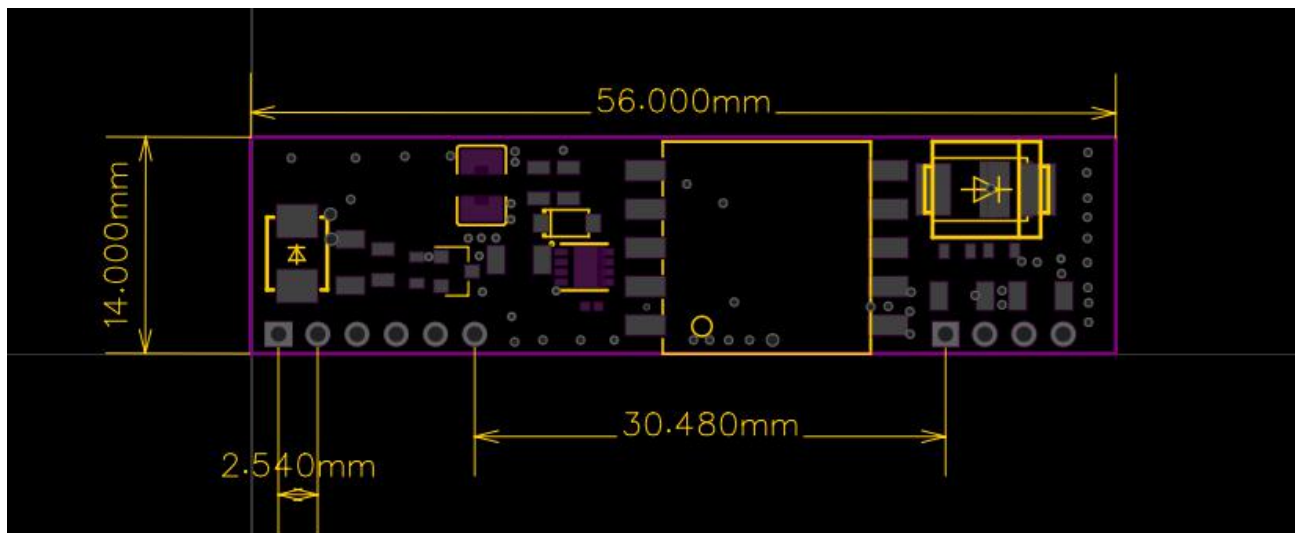


DESCRIPTION

5V, 13W PD(Powered Device) Integrated Module (Isolation Type)

FEATURES

- Fully supports IEEE802.3af
- Small Single In-Line (SIL) package size –56mm (L) x 14mm (H)
- 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 0)
- 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)



PIN ASSIGNMENT

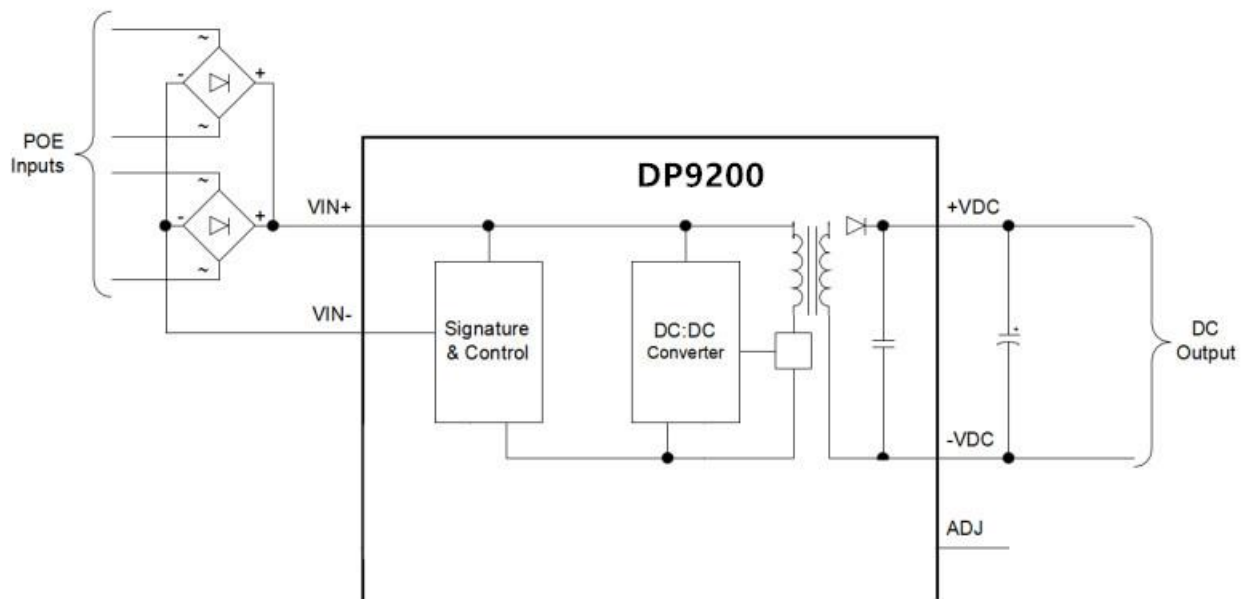
1	VIN+	POE Direct Input +. This pin connects to the positive (+) output of the input bridge rectifiers (internally connected to pin 3).
2	VIN-	POE Direct Input -. This pin connects to the negative (-) output of the input bridge rectifiers (internally connected to pins 4 and 5).
3	VIN+	POE Direct Input +. Internally connected to pin 1.
4	VIN-	POE Direct Input -. Internally connected to pin 2.
5	NC	NC. Do not connect to this pin.
6	NC	NC. Do not connect to this pin.
7	-VDC	Negative DC Output. The ground return for the +VDC output.
8	+VDC	Positive DC Output. This pin provides the regulated output from the DC/DC converter.
9	ADJ	Output Adjust. The output voltage can be adjusted from its nominal value, by connecting an external resistor from this pin to either the +VDC pin or the -VDC pin.
10	NC	NC. Do not connect to this pin.

Output Adjustment

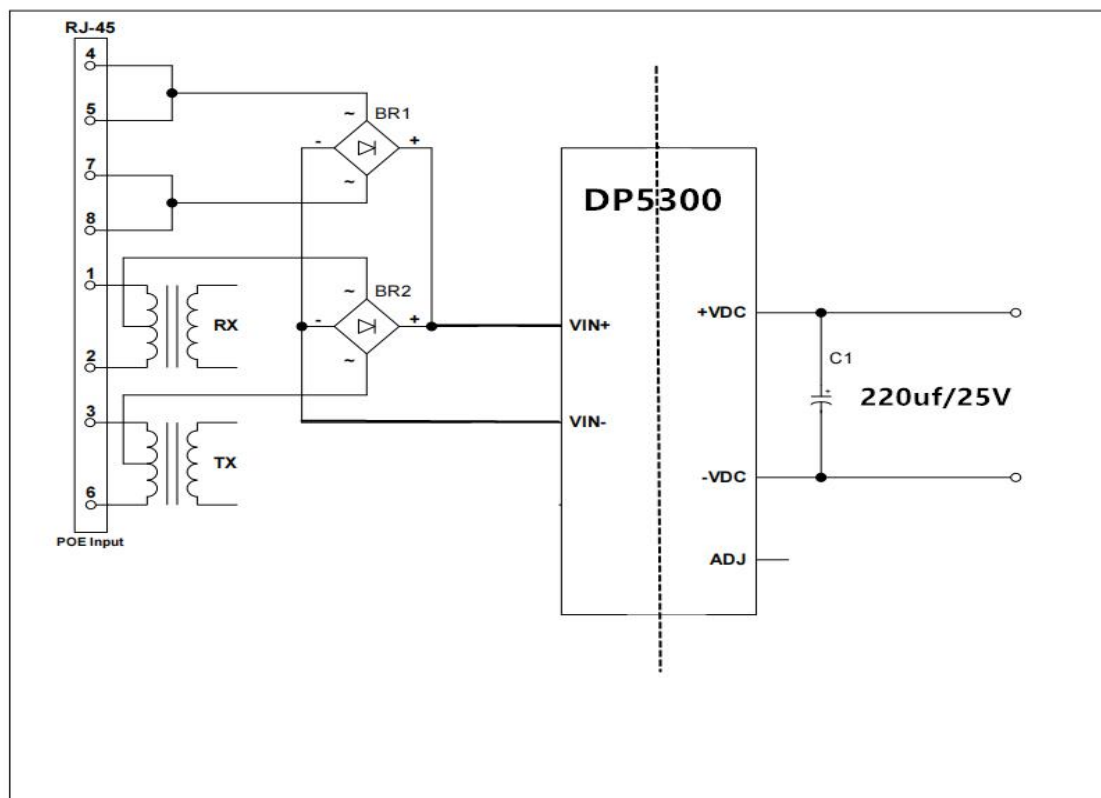
Reducing the output voltage, connect R between ADJ and +VDC	
Value of R	DP9205 output
Open Circuit	5V
0 R	4.5V
100K	4.75V
200k	4.83V
Increasing the output voltage, connect R between ADJ and -VDC	
Value of R	Ag9205 output
Open Circuit	5V
0 R	5.65V
100K	5.26V
200k	5.16V

Output Adjustment Resistor (R) Value

TYPICAL SYSTEM DIAGRAM



TYPICAL APPLICATION



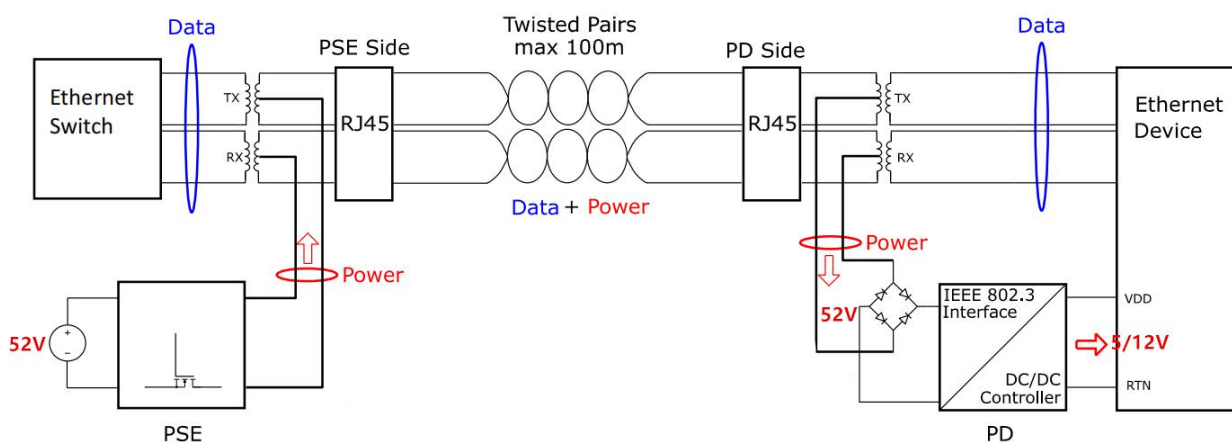
TEST DATA

Model	Input Voltage (after bridge)	Input Current	Output Voltage	Output Current	Efficiency	Ripple Output Noise
	V	mA	V	A	%	mV
DP9200	50.39	284	5.0	2.5	87.52%	150
	50.5	226	5.0	2	87.79%	120
	50.48	170	5.0	1.5	87.57%	95
	50.58	115	5.0	1	86.13%	75
	50.68	60	5.0	0.5	82.38%	50
	50.91	8	5.0	0	0.00%	

ELECTRICAL SPECIFICATIONS

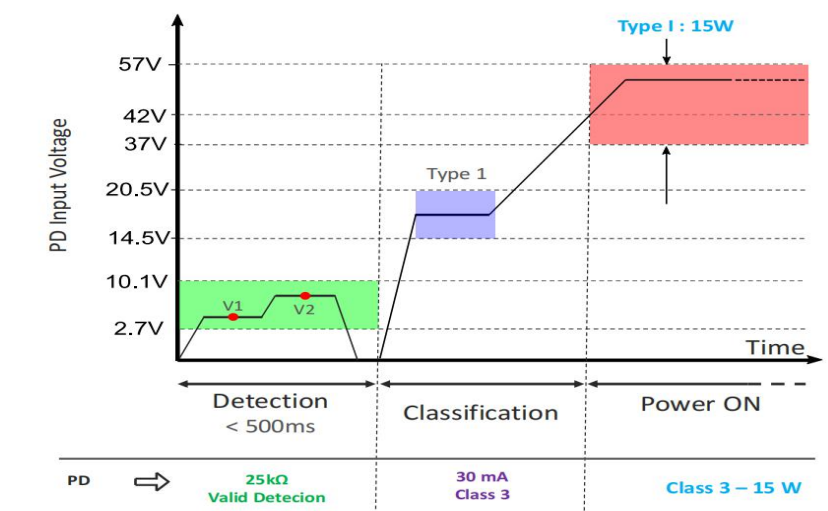
No.	Parameter	Symbol	Min	Typical values	Max	Unit
1	Input Voltage	Vin	37	48	57	V
2	output voltage	+VDC	4.9	5	5.1	V
3	output Current	PWR	0.05	2	2.6	A
4	Isolation Voltage	VISO		1.5		KV
5	Ripple Output Noise	VRN		120		mVp-p@2A
6	Storage Temperature	Tj	-40	25	85	°C
7	Operating Temperature	Tstg	-40	25	80	°C

1. Power Delivery in PoE Systems

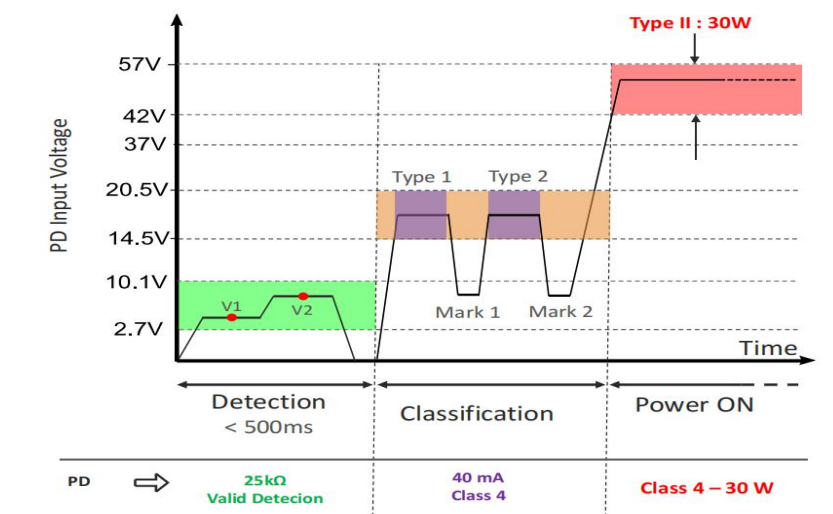


	Type 1 802.3af			Type 2 802.3at	Type 3 802.3bt		Type 4 802.3bt	
Power Class	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7	Class 8
Power from PSE	4 W	7 W	15.4 W	30 W	45 W	60 W	75 W	90 W
Power delivered to PD	3.84 W	6.49 W	13 W	25.5 W	40 W	51 W	62 W	71.3 W

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)

