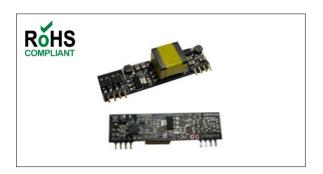


# **TW-C100PV(S)**

Power Over Ethernet Module for CCTV



- ➤ IEEE802.3af Compliant
- > Input voltage range: 36V ~ 57V
- > Short-circuit protection
- > Adjustable Output
- > Pb free and RoHS compliant
- ➤ Power Classification: Class0

This PSU accepts PoE(IEEE802.3af) input. As it use RCC(Ringing Choke Converter) type SMPS which is operated by variable frequency. Within this input power, its output can meet +12V and 12W(Typ.) power can be supported. It includes compensation circuit board to avoid the case like short-circuit of main unit and short of this PSU. By this circuit board architecture, it prevents fire and smoke of power itself.

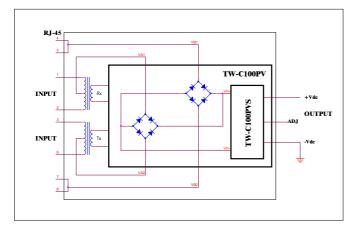
The TW-C100PV series of modules are designed to extract power from a conventional twisted pair Category 5 Ethernet cable, conforming to the IEEE 802.3af Power-over-Ethernet (PoE) standard.

# **■** Product Line-up

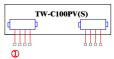
Model No.	Output Voltage (typ.)	Output Power (Max.)	Remark
TW-C100PV	12.0V	12W	
TW-C100PVS	12.0V	12W	Note1)

Note1) It does not have the two input bridge rectifiers

## **■** Block Diagram



## ■ Pin Description



#### > TW-C100PV

Pin No.	Name	Description		
1	VA1	<b>Rx Input;</b> This input pin is used in conjunction with VA2 and connects to the center tap of the transformer connected to pins 1 & 2 of the RJ45 connector(Rx) - it is not polarity sensitive.		
2	VA2	<b>Tx Input;</b> This input pin is used in conjunction with VA1 and connects to the center tap of the transformer connected to pins 3 & 6 of the RJ45 connector(Tx) - it is not polarity sensitive.		
3	VB1	<b>Direct Input(1);</b> This input pin is used in conjunction with VB2 and connects to pin 4 & 5 of the RJ45 connector - it is not polarity sensitive.		
4	VB2	<b>Direct Input(2);</b> This input pin is used in conjunction with VB1 and connects to pin 7 & 8 of the RJ45 connector - it is not polarity sensitive.		
5	-VDC	DC Return; This pin is the return path for the +VDC output		
6	+VDC	<b>DC Output;</b> This pin provides the regulated output from the DC/DC converter		
7	ADJ	<b>Output Adjust;</b> The output voltage can be adjusted form is nominal value, by connecting an external resistor from this pin to either the +VDC pin or the -VDC pin.		
8	GND	GND		

#### > TW-C100PVS

Pin No.	Name	Description	
1,3	Vin+	<b>Direct Input+;</b> This pin connects to the positive(+) output of the input bridge rectifiers (internally connected Pin1 to Pin3)	
2,4	Vin-	<b>Direct Input-;</b> This pin connects to the negative(-) output of the input bridge rectifiers (internally connected Pin2 to Pin4)	
5	-Vdc	DC Return; This pin is shorted with GND	
6	+Vdc	<b>DC Output;</b> This pin provides the regulated output from the DC/DC converter	
7	ADJ	Output Adjust; The output voltage can be adjusted form is nominal value, by connecting an external resistor from this pin to either the +Vdc pin or the -Vdc pin.	
8	GND	GND	

### **■** Power Classification

To minimize cost, the TW-C100PV(S) is fixed for Class 0 (0.44 Watts to 12.95 Watts) operation, however class programmable versions are available on request.

# Dimension

