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# OVER-VOLTAGE SUPPRESSION UNIT

## MODEL OV-4887

For Ethernet Twisted Pair 10Base-T, 100Base-TX, or 100Base-T2 Signaling

### PRODUCT DESCRIPTION AND INSTALLATION DETAILS

#### ACA PERMIT

Design Two Thousand Pty Ltd ACA Supplier's Code N468

#### DESCRIPTION

The OV-4887 is an over-voltage suppression unit used to protect Ethernet hubs and switches, routers, megalinks etc. (data networks), and all elements upstream from the terminal equipment should dangerous voltages be accidentally imposed by faulty equipment or wiring. The OV-4887 is an electrical safety barrier.

The Over-Voltage Suppression card PC-4887 is used to protect the Tx and Rx pairs of a 10 or 100 Mbps Ethernet hub port from improper voltages such as mains 240Vac rms. This voltage may originate either from connected equipment or its data path cabling. Connections are made via two RJ45 sockets identified as 'Equip'' and 'Line' and a MANDATORY earth connector.

The OV-4887 card complies with AS3260 1998 Appendix G where less than 3.5mA rms of earth leakage current can flow when all four 'Equipment' wires are connected simultaneously to 240V ac rms (which would be the worst case fault condition).

The OV-4887 is also available in a multi-port rack version. Up to 10 cards may be fitted into a two unit high 19 inch half depth rack mounting case. In this configuration, the RJ45 connectors are accessible from the front while a screw terminal on the back panel provides a group earth.

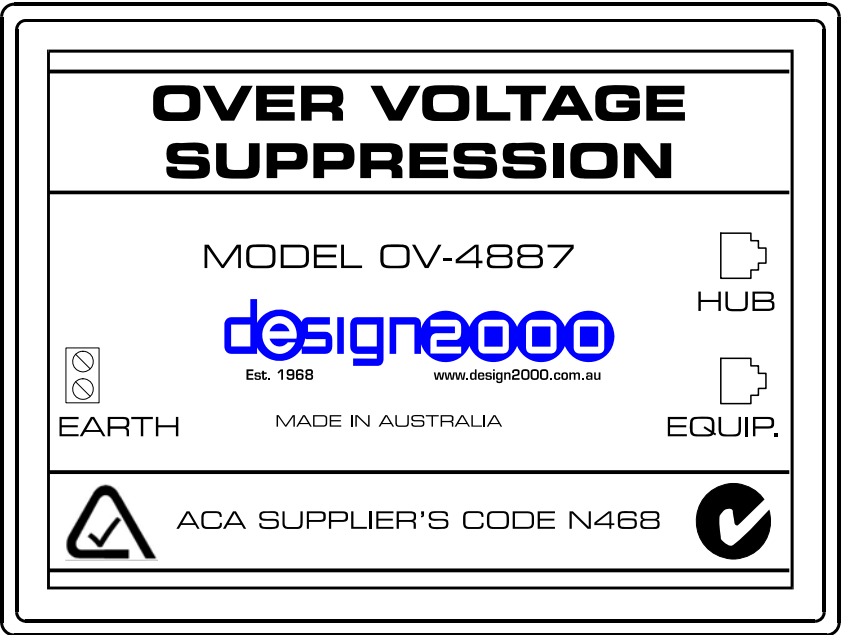
The OV-4887 100Ω clamping circuits are transparent to data transmitted between 10 and 100 Mbps.

In summary, the OV-4887 guards against dangerous voltages being passed from Customer Equipment to a data network. In doing so it reduces the risk of electric shock to persons should dangerous voltages be accidentally imposed from the Customer (terminal) equipment.

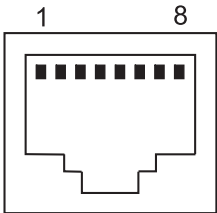
**Please Note:** The OV-4887 can also be ordered for 2Mbps 120 Ohm circuits (eg. E1 paths).

# CONNECTION

## Front Panel



Equipment (SK1)	TXD +	Pair 3	Pin 1
	TXD -	(T568A)	Pin 2
	RXD+	Pair 2	Pin 3
	RXD-	(T568A)	Pin 6
Line (SK2)	TXD +	Pair 3	Pin 1
	TXD -	(T568A)	Pin 2
	RXD +	Pair 2	Pin 3
	RXD -	(T568A)	Pin 6

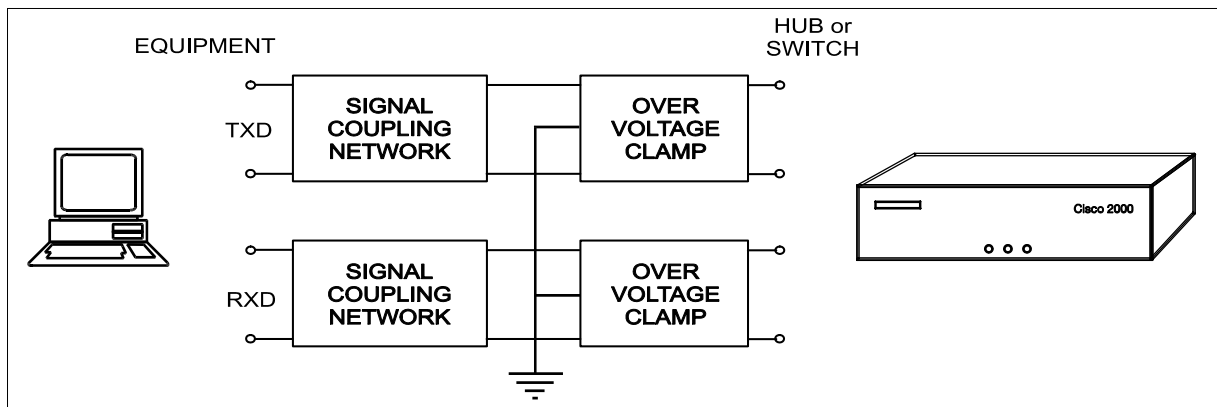


Viewed from  
front of socket

## Earth Connection

Connect either of the two Earth terminals to a suitable ground point.

## BLOCK DIAGRAM OF THE OV-4887



## PART NUMBERS

OV-4887	4W 100 Mbps Over-Voltage Suppression Unit – Stand-alone
RA-4795	LI-2782BR 2RU 19” Sub-rack
PC-4887 100 Mbps	4W 100 Mbps Over-Voltage Suppression Card

Designed and Manufactured in Australia

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N468

