

TSW114 Powering Options

[Main Page](#) > [TSW Switches](#) > [TSW114](#) > [TSW114 Manual](#) > **TSW114 Powering Options**

This chapter contains information on powering options supported by TSW114 switch.

□

Contents

- [1 Power socket](#)
 - [1.1 2 pin power socket](#)
- [2 Passive PoE](#)
- [3 Ground loops](#)

The switch has a pin power socket and can be powered by a 9-30 VDC power supply unit (PSU). Refer to the image below for the power socket's pinout information:

Power socket

2 pin power socket

No.	Description	Wire color
1	Power	Red
2	Ground	Black



Passive PoE

The device may also be powered by an Ethernet cable via the **LAN1** port:
(Do not use in other ports!)



- The device is **NOT COMPLIANT** with the IEEE 802.3af-2003 standard: powering the device from an IEEE 802.3af-2003 power supply **will damage the device** as it is not rated for input voltages of the PoE standard.
- The device is **NOT COMPLIANT** with the IEEE 802.3at standard: it cannot power other devices over Ethernet.

RJ45 pinout:

10/100		T568A Color	T568B Color	Pins on plug face (socket is reversed)
Pin mode B, DC on spares				
1	TX+	 white/green stripe	 white/orange stripe	
2	TX-	 green solid	 orange solid	
3	RX+	 white/orange stripe	 white/green stripe	
4	DC+ 9-30 VDC	 blue solid	 blue solid	
5	DC+ 9-30 VDC	 white/blue stripe	 white/blue stripe	
6	RX-	 orange solid	 green solid	
7	DC-	 white/brown stripe	 white/brown stripe	
8	DC-	 brown solid	 brown solid	

Ground loops

Do not connect the power supply negative terminal of our device to the chassis or earth exclusively.

This connection could cause ground loops. For example, if the antenna shield and power supply negative terminal are connected to the chassis or earth, it forms a ground loop, therefore unwanted current could flow through a device PCB ground and may cause damage.

In networking switches connecting our device power supply negative terminal to the chassis or earth could cause damage to other devices connected to the switch or unintentional power up of other devices.

