

The **PSI301P** is an active impedance control device suitable to be used as equivalent impedance of 250Ω in the HART® network, connecting various field-devices, especially in multidrop mode.

Because the output current can be as high as 20 mA or more for each device on HART® networks with up to 15 multidropped smart transmitters operating as controllers, these networks require special components different from those used with single transmitters or multidropped transmitters in multidrop mode. The network voltage is a nominal 18V even at a load of 15 transmitter in normal or control mode. The PSI301P gets power from a normal DC power supply like PS302P.

The function of the power supply impedance is to provide an impedance between the power supply and the HART® network to ensure that the power supply does not short circuit the communication signal on the network. Power and network wiring is done using plug-in connectors, which makes removal and insertion easy. The connectors have an optional keying preventing the wrong wires from going into the wrong module.

The PSI301P has built-in diagnostics and dedicated LEDs indicating normal operation and failure which make troubleshooting much easier, especially in a system with many units. Spotting the faulty PSI301P in a panel with many modules is easy.

An externally accessible protection fuse on the incoming line side is capable of being replaced without removal of the module or disconnecting any wiring. The output is short circuit protected, and is not damaged even by prolonged shorts. The PSI301P is therefore the ideal choice in critical operations.

The PSI301P is available in versions with 2 or 4 ports.



TECHNICAL CHARACTERISTICS

Electrical characteristics

Power supply:

24 to 32 Vdc $\pm 10\%$.

Output Current:

320 mA (Max).

Ambient Conditions

Operation:

-20 °C to +50 °C @RH 10% to 95%, without condensing.

Storage:

-50 °C to +70 °C @RH 5% to 95%, without condensing.

Safety Characteristics

Input Over-voltage:

Limited in 35 Vdc.

Output Over-current:

Limited in 340 mA.

Atmospherics Discharges:

Input and output protected for surge suppressor.

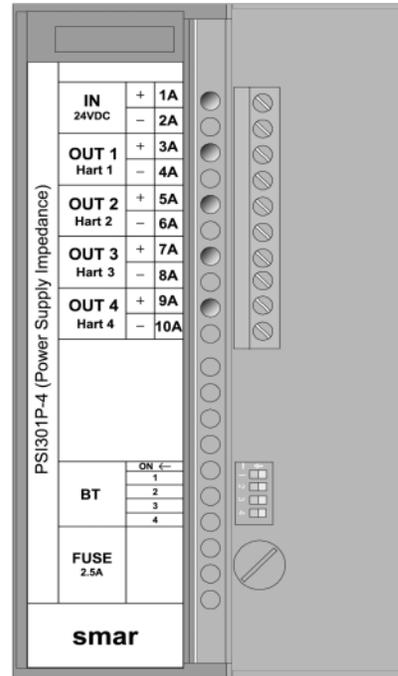
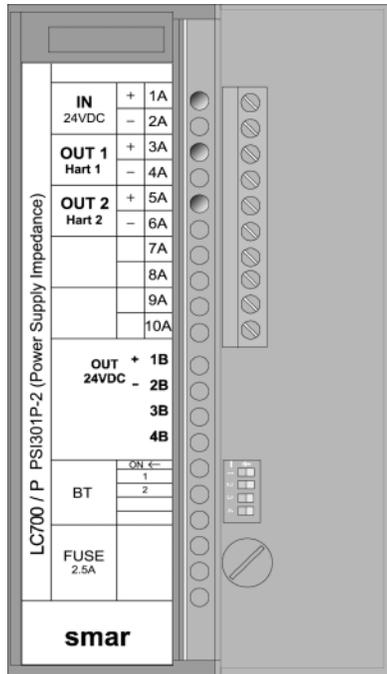
Intrinsic Safety:

It cannot be used directly without using intrinsically safety barriers.

Approximate Weight:

230 g.

TERMINAL BLOCK



ORDERING CODE

PSI301P	POWER SUPPLY IMPEDANCE FOR HART® NETWORKS	
	CODE	Numbers Channels
	2	Two Channels
	4	Four Channels

PSI301P - 2 ← TYPICAL MODEL NUMBER

DIMENSIONS

Dimensions are mm (in)

