

Smart Dupline® Decentralized Analog Input Module Type SHPINV2T1P124



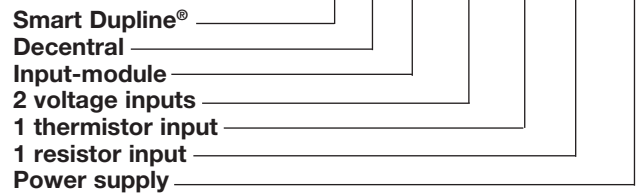
- 2 x 0-10 VDC analog inputs
- 1 x thermistor 10K3 input
- 1 x variable resistor 1-11 KΩ
- 24 VDC
- Compact housing for decentralized installation inside wall-box or environmental sensor housings

Product Description

SHPINV2T1P124 is an input module with 4 analog inputs. The compact size of the module makes it possible to fit it into a wall-box or environmental sensor housing, thereby enabling a decentralized installation concept where the Dupline® bus and DC power are multi-dropped from sensor to sensor. This simplifies the wiring to the controller

compared to the traditional star wiring connections, reduces the number of DDCs and sub-panels required and provides a higher flexibility for last-minute changes and enhancements. The module has 1 x thermistor 10K3 input, 1 x variable resistor 1-11 KΩ and 2 x 0-10 VDC inputs. It is fully programmable via SH tool.

Ordering Key SH P IN V2 T1 P1 24



Type Selection

Input number	Type	Supply: 24 VDC ±20%
4	2 voltage, 1 thermistor, 1 resistor	SHPINV2T1P124

Supply Specifications

Power Supply	
Operational voltage range	24 VDC ±20%
Max ripple	1 V
Reverse polarity protection	Yes
Overvoltage category	Overvoltage cat. II (IEC 60664-1, par. 4.3.3.2)
Rated impulse voltage	500 V (1.2/50µs) (IEC 60664-1, tab. F.1)
Typ. current consumption	15 mA (only internal)
Max. output current	100 mA (not self-limited)
Power on delay	≤ 2 s
Power off delay	≤ 1 s

Dupline® Specifications

Voltage	8.2 V
Maximum Dupline® voltage	10 V
Minimum Dupline® voltage	5.5 V
Maximum Dupline® current	1.5 mA

Specifications for Analog Inputs

Input 1 and 2	
Input type	2 x 0-10 VDC
Inaccuracy	<0.5% fs (over entire temp. range)
Max input level	50 V
Input impedance	>100 KΩ
Cable length	< 5 m
Input 3	
Input type	1 x Thermistor 10K3
Signal range	Trend standard, 0 - 50°C
Inaccuracy	< 0.5°C (over entire temp. range)
Cable length	< 5 m
Input 4	
Input type	1 x 1-11 KΩ
Signal range	0 - 100%
Inaccuracy	< 1% (over entire temp. range)
Cable length	< 5 m

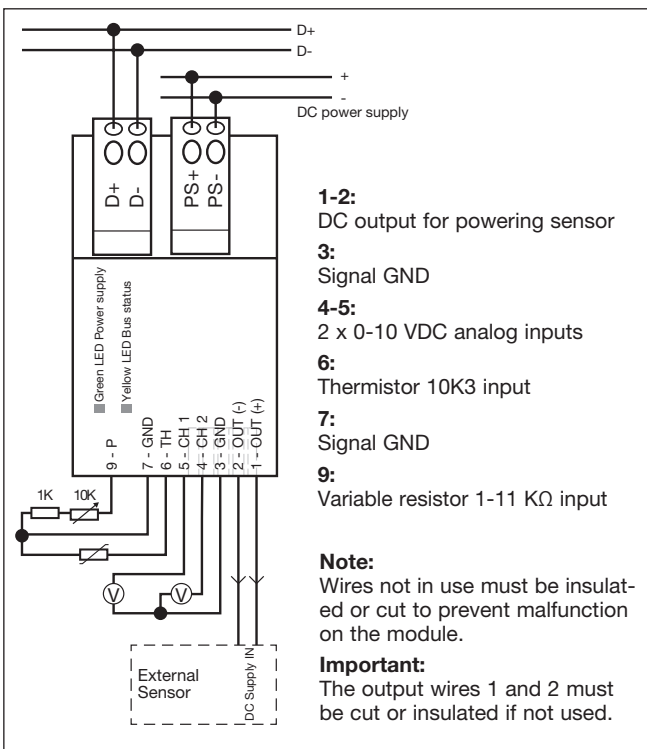


General Specifications

Environment	
Pollution degree	2(IEC 60664-1, par. 4.6.2)
Operating temperature	0 to +50°C (-4 to +122°F)
Storage temperature	-50 to +85°C (-58 to + 185°F)
Humidity (non-condensing)	20 - 90%
Housing	
Material	Macromelt
Colour	Ambra
Dimensions (h x w x d)	50 x 30 x 18 mm
Weight	50 g
Protection degree	IP20
Terminal block	
Power supply input	2 x spring terminal (double)
Dupline® bus	2 x spring terminal (double)
Cross-sectional area	Terminal: 1.5 mm ²
Tightening torque	0.6 Nm/0.8 Nm
Cable x 8	
DC+ supply for sensor	Out (+)
DC- supply for sensor	Out (-)
Signal ground	GND
V1 input 0-10 VDC	CH2
V2 input 0-10 VDC	CH1
Thermistor input	TH
Signal ground	GND
Variable resistor input	P
Cross-section area	0.14 mm ²
Wire length	0.25 m
Dielectric strength	
Dupline® to signal input	None

Address assignment	Automatic: the controller recognises the module through the SIN (Specific Identification Number) that has to be inserted in the SH tool.
EMC	
Immunity	EN61000-6-2
- Electrostatic discharge	EN61000-4-2
- Radiated radiofrequency	EN61000-4-3
- Burst immunity	EN61000-4-4
- Surge	EN61000-4-5
- Conducted radiofrequency	EN61000-4-6
- Power frequency magnetic fields	EN61000-4-8
- Voltage dips, variations, interruptions	EN61000-4-11
Emission	
- Conducted and radiated emissions	CISPR 22 (EN55022), cI.B
- Conducted emissions	CISPR 16-2-1 (EN55016-2-1)
- Radiated emissions	CISPR 16-2-3 (EN55016-2-3)
Approvals	CE cULus according to UL60950

Wiring Diagram



Dimensions

