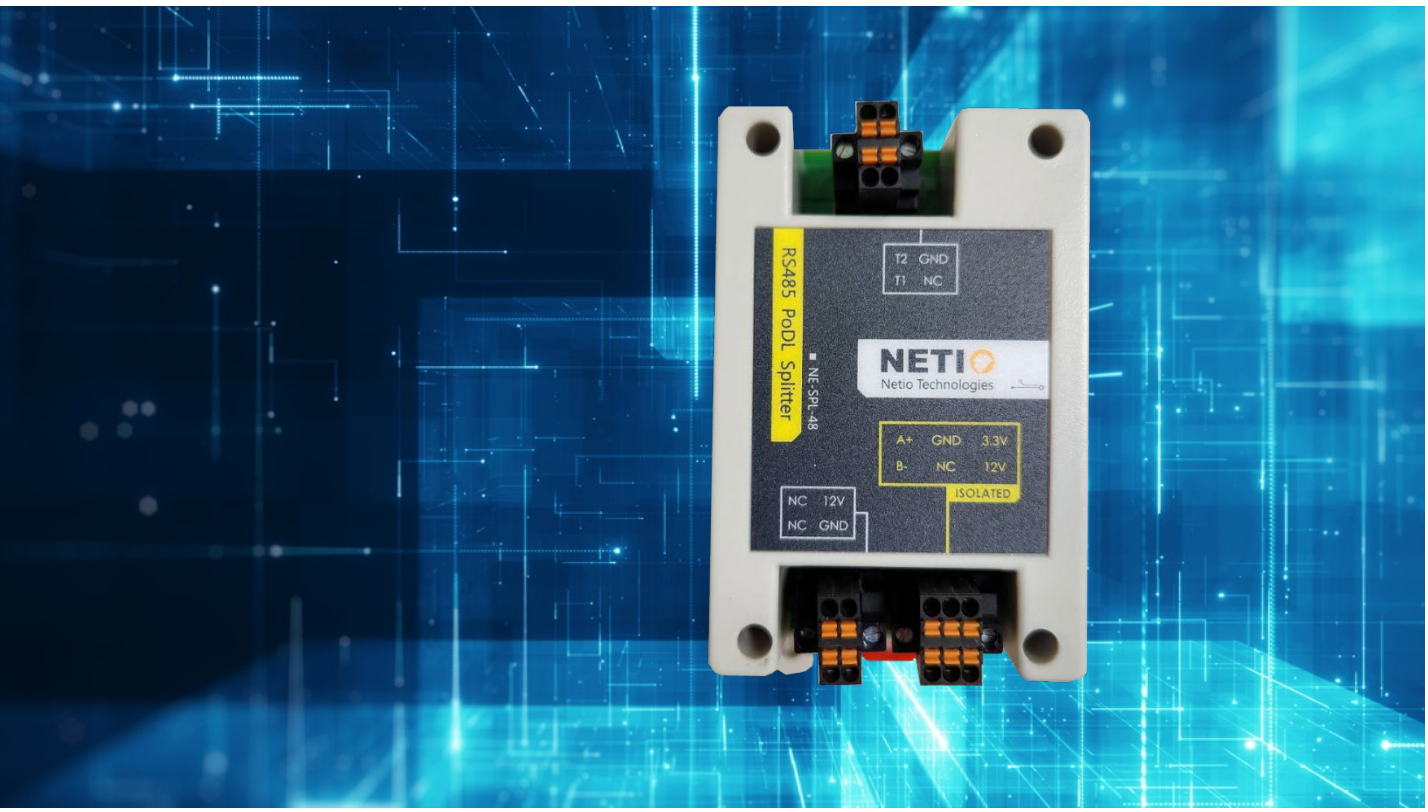

RS485 PoDL Splitter

NE-SPL-48

Features

- RS-485 Bus with DC Power delivery
- High noise immunity for industrial application
- Software transparences to RS485 Modbus
- Buad rate 38400/19200/9600/2400 half duplex
- Support for 12V 450 mA per RS485 twisted pair line
- Meet or exceed EMS requirement
  IEC 61000-4-2 contact discharge – ± 6kV
  IEC 61000-4-2 air gap discharge – ± 8kV
  IEC 61000-4-4 fast transient burst ± 2 kV

Description

NE-SPL-48 is a RS-485 over power line transceiver for powered device side with on-off keying (OOK) modulation and demodulation function built in design for data communication line together with dc power feed.
Modulating data onto twist pair lines allows dc power delivery and data communication to share a common pair of twisted wires,In resulting for significant reduction of the system installation cost.
NE-SPL-48 transforming OOK signals and split the DC power form data line.
OOK modulation operates with immunity to data polarity for ease of system installations. The DC out put with polarity rectifier for DC+ and DC- no matter the data wiring pairs polarity.
The DC power can be galvanic isolated by built in DC/DC or Direct output the DC voltage delivered from NE-SPL-48.

NE-INS-48 and NE-SPL-48 need to be used together

Specifications

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
Operating Input Voltage		10.8	12	25	V
Internal Power Dissipation		-	6	-	W
Start up Time	Nominal Vin and constant resistive load			10	ms
Input Reflected Ripple Current			20		mApk-pk
Recommended input fuse	12V Input			0.5	A
Output Voltage		-	12	-	V
Output Voltage Accuracy	Nominal Vin	-3.0		+3.0	%
Isolation Output Voltage 3.3			3.3		V
Isolation Output Voltage 12			12		V
Output Current Limit:		-	-	0.5	A
Isolation Output Curren Limit 3.3			-	1.5	A
Isolation Output Curren Limit 12		-	-	0.4	A
Baud Rate		-	-	38400	bps
Output Serial		RS485/UART TTL Select by Jumper			
Short Output Protection		Continuous and automatic recovery			
Temperature Coefficient		-0.02		+0.02	%/°C

Dimension

W x D x H (mm)