

Inline function terminal - IB IL RS 485-ECO - 2702141

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Inline ECO communication terminal, for serial data transmission, 1 serial input and output channel in RS-485 format, with connector plug

Product Description

The terminal is designed for use within an Inline station.

The terminal is used to operate standard I/O devices with serial interfaces on a bus system.

Inline ECO terminals are approved for the temperature range from 0°C to +55°C. The electronics base and Inline connector are supplied as standard.

Your advantages

- ✓ One serial input and output channel in RS-485 format
- ✓ Data is transmitted in transparent mode
- ✓ Transmission speed can be set up to 38,400 bps
- ✓ Number of data bits, stop bits and parity can be set
- ✓ Parameterization via process data

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 983235
GTIN	4046356983235

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---

Dimensions

Caption	Dimensions
Width	12.2 mm
Height	119.8 mm
Depth	71.5 mm

Inline function terminal - IB IL RS 485-ECO - 2702141

Technical data

Connection data

Designation	Inline connector
Connection method	Spring-cage connection
Conductor cross section solid min.	0.08 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section flexible min.	0.08 mm ²
Conductor cross section flexible max.	1.5 mm ²
Conductor cross section AWG min.	28
Conductor cross section AWG max.	16
Stripping length	8 mm

Ambient conditions

Ambient temperature (operation)	0 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)
Air pressure (operation)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Degree of protection	IP20

General

Mounting type	DIN rail
Color	green
Net weight	84.8 g
Note on weight specifications	with connector

Interfaces

Designation	Inline local bus
Connection method	Inline data jumper
Transmission speed	500 kbps
Interface	RS-485
Connection method	Spring-cage connection
Transmission physics	Copper
Protocols supported	Transparent
Data bits	6 ... 8
Stop bits	1 or 2
Input buffer	4 kByte
Output buffer	1 kByte

Inline potentials

Designation	Communications power (U _L)
Supply voltage	7.5 V DC (via voltage jumper)
Current consumption	typ. 70 mA
	max. 85 mA

Inline function terminal - IB IL RS 485-ECO - 2702141

Technical data

Inline potentials

Power consumption	typ. 525 mW (at U_L)
-------------------	-------------------------

Serial input/output channel

Parity	Even, odd or no parity
Transmission type	Transparent mode

Electrical isolation

Test section	Serial interface/7.5 V supply (bus logic) 500 V AC 50 Hz 1 min.
	Serial interface/24 V supply U_M 500 V AC 50 Hz 1 min.
	Serial interface/functional ground 500 V AC 50 Hz 1 min.
	7.5 V supply (bus logic)/functional ground 500 V AC 50 Hz 1 min.
	24 V supply (U_M)/functional ground 500 V AC 50 Hz 1 min.

Standards and Regulations

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
------------------	---------------------------------------

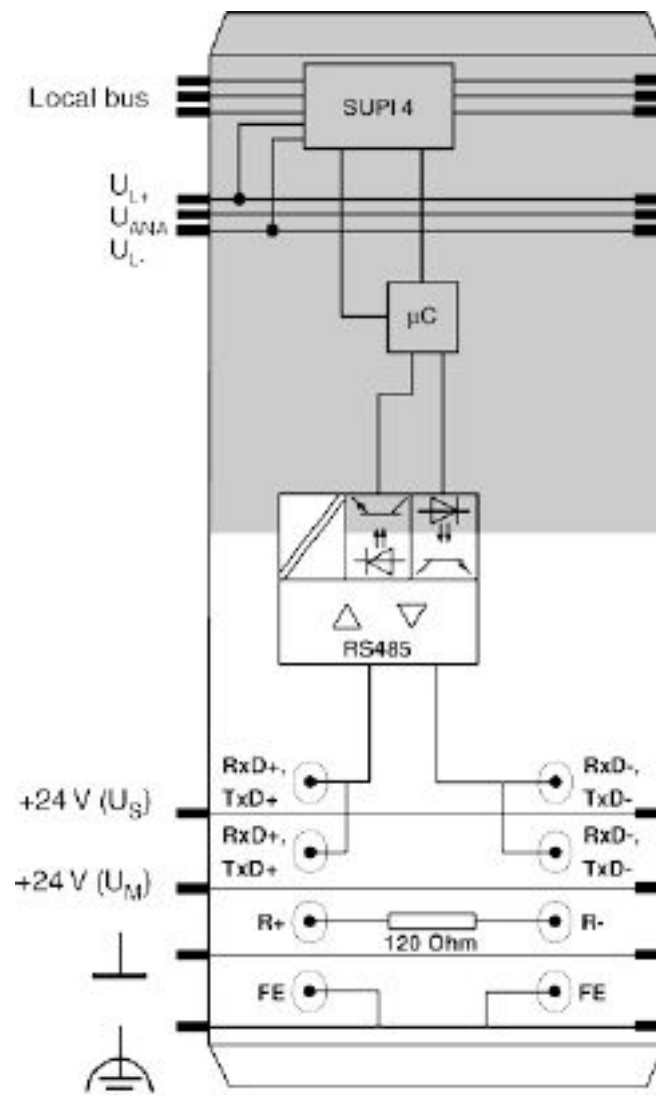
Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

Inline function terminal - IB IL RS 485-ECO - 2702141

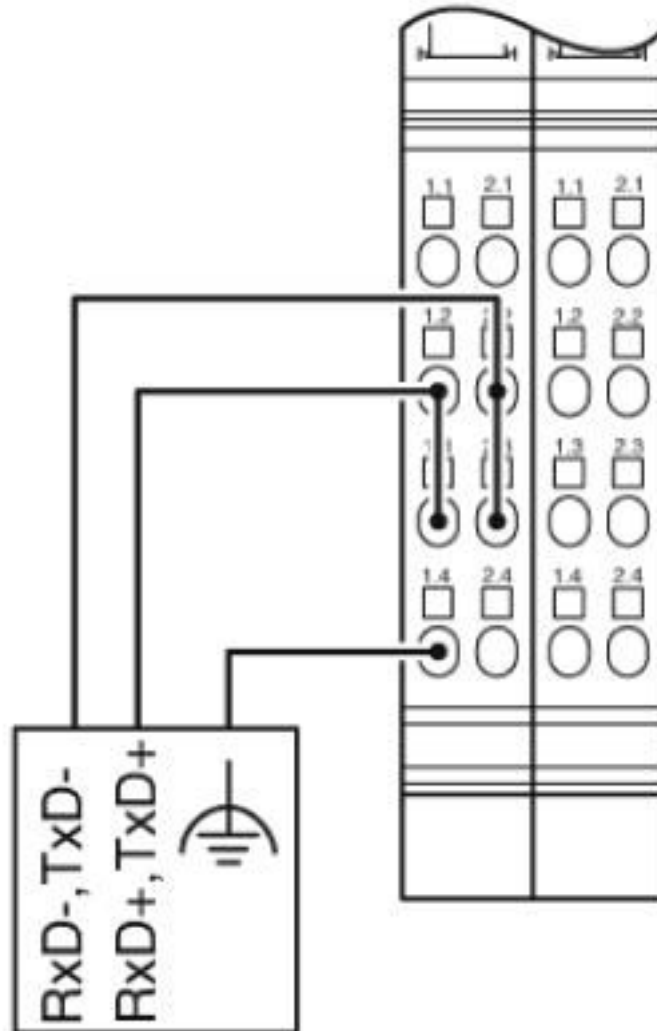
Block diagram



Internal wiring of the terminal points

Inline function terminal - IB IL RS 485-ECO - 2702141

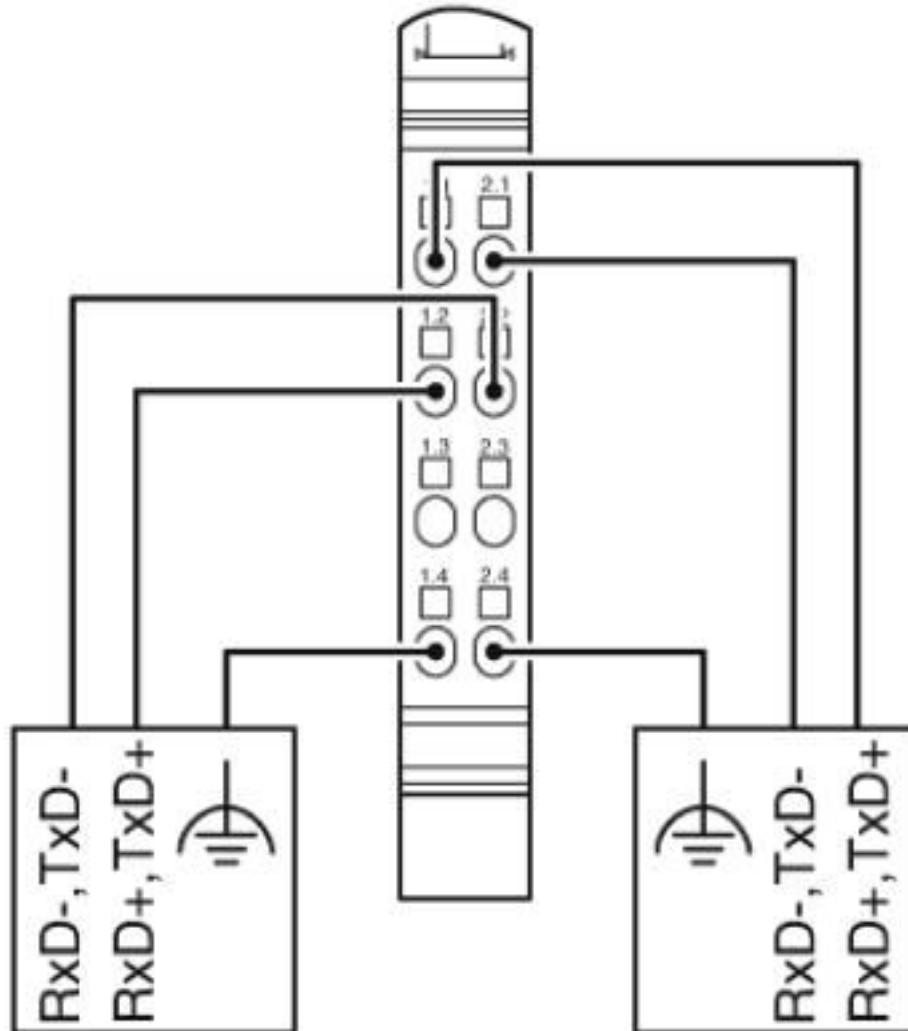
Connection diagram



Inline terminal as network end point

Inline function terminal - IB IL RS 485-ECO - 2702141

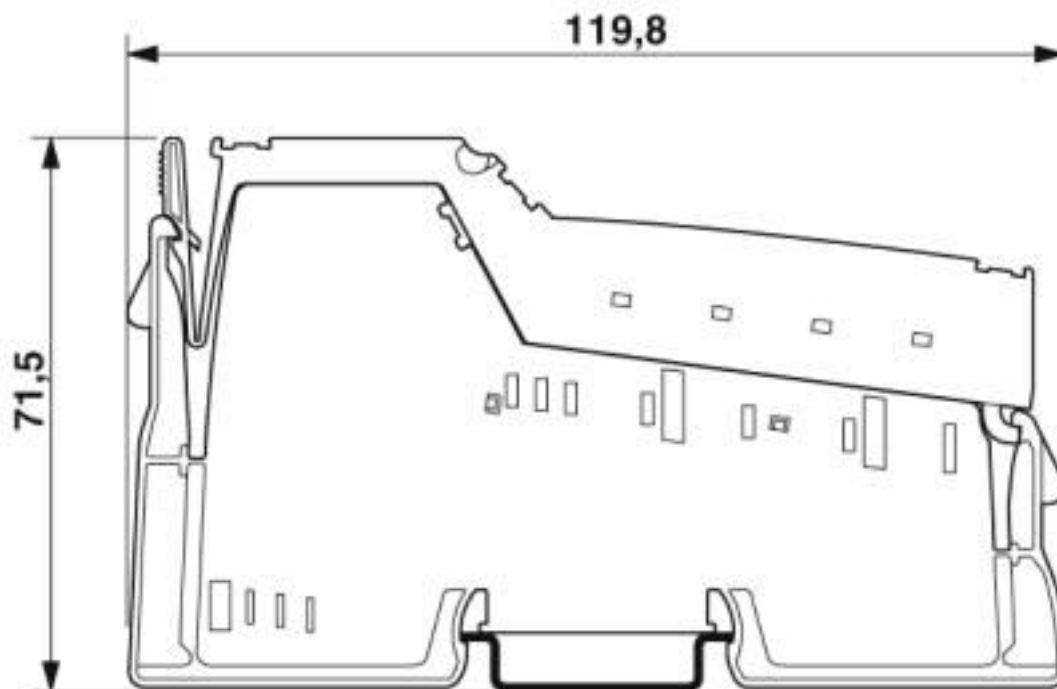
Connection diagram



Inline terminal in the network center

Inline function terminal - IB IL RS 485-ECO - 2702141

Dimensional drawing



Dimensions

Classifications

eCl@ss

eCl@ss 10.0.1	27242605
eCl@ss 5.1	27242600
eCl@ss 6.0	27242600
eCl@ss 7.0	27242605
eCl@ss 8.0	27242605
eCl@ss 9.0	27242605

ETIM

ETIM 5.0	EC001601
ETIM 6.0	EC001601
ETIM 7.0	EC001601

UNSPSC

UNSPSC 13.2	32151602
UNSPSC 18.0	32151602
UNSPSC 19.0	32151602
UNSPSC 20.0	32151602
UNSPSC 21.0	32151602

Inline function terminal - IB IL RS 485-ECO - 2702141

Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approval details

UL Listed



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

FILE E 238705

cUL Listed



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

FILE E 238705

cULus Listed



Accessories

Accessories

Installation terminal block

Connection terminal block - AKG 4 GNYE - 0421029



Connection terminal block, connection method: Screw connection, load current: 41 A, cross section: 0.5 mm² - 6 mm², width: 7 mm, color: green-yellow

Connection terminal block - AKG 4 BK - 0421032



Connection terminal block, connection method: Screw connection, load current: 41 A, cross section: 0.5 mm² - 6 mm², width: 7 mm, color: black

Labeling panel

Inline function terminal - IB IL RS 485-ECO - 2702141

Accessories

Labeling field - IB IL FIELD 2 - 2727501

Labeling field, width: 12.2 mm



Neutral conductor rail

Neutral busbar - NLS-CU 3/10 SN 1000MM - 0402174



Neutral busbar, width: 10 mm, height: 3 mm, DIN VDE 0611-4: 1991-02, material: Copper, tin-plated, length: 1000 mm, color: silver

Pick-off terminal block

Connection terminal block - AK 4 - 0404017



Connection terminal block, connection method: Screw connection, load current: 41 A, cross section: 0.5 mm² - 6 mm², width: 7 mm, color: silver

Plug

Inline connector - IB IL SCN-8 - 2726337

Connector, for digital 1, 2 or 8-channel Inline terminals



Inline shield connector - IB IL SCN-6 SHIELD - 2726353



Inline shield connector

Shield connection clamp

Inline function terminal - IB IL RS 485-ECO - 2702141

Accessories

Shield connection clamp - SK 8 - 3025163



Shield connection clamp, for shield on busbars, contact resistance < 1 mΩ

Shield connection clamp - SK 14 - 3025176



Shield connection clamp, for shield on busbars, contact resistance < 1 mΩ

Shield connection clamp - SK 20 - 3025189



Shield connection clamp, for shield on busbars, contact resistance < 1 mΩ

Shield connection clamp - SK 35 - 3026463



Shield connection clamp, for shield on busbars, contact resistance < 1 mΩ

Support

Support bracket - AB-SK - 3025341



Support bracket for busbars

Inline function terminal - IB IL RS 485-ECO - 2702141

Accessories

Support bracket - AB-SK 65 - 3026489



Support bracket, Bracket for busbars, set every 20 cm, length: 95.5 mm, width: 6.2 mm, number of positions: 1, color: gray

Support bracket - AB-SK/E - 3026476



Support bracket, Bracket for busbars, set every 20 cm, length: 10 mm, width: 56 mm, height: 20 mm, number of positions: 2, color: silver

Terminal marking

Insert strip - ESL 62X10 - 0809492



Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems: Laser printer, mounting type: insert, lettering field size: 62 x 10 mm, Number of individual labels: 72

Phoenix Contact 2020 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Phoenix Contact:](#)

[2702141](#)