

> PRIVA BLUE ID S-LINE SC44

Communication module RS485

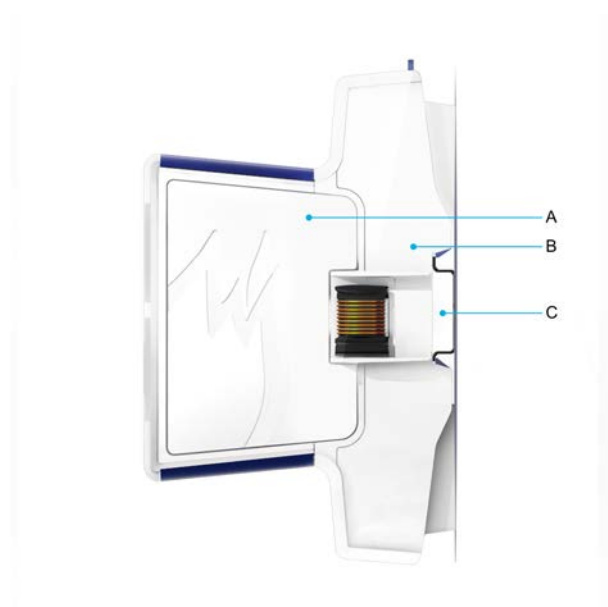


An Priva Blue ID S-Line SC44 Communication module RS485 provides the system with two RS485 ports for serial communication and is used to connect field bus devices.

Characteristics

- two RS485 ports for serial communication
- ports electrically isolated from system neutral
- ports electrically isolated from each other
- both ports have an A, B and 0 connection
- 24 V system power supply monitoring
- clear labelling of ports
- LED for communication status per port
- LED for status of module
- Priva Blue ID Lifeline
- text card for identification of ports

Modular design



All communication modules (A) have the same base (B). You simply click the base with module onto the DIN rail (C).

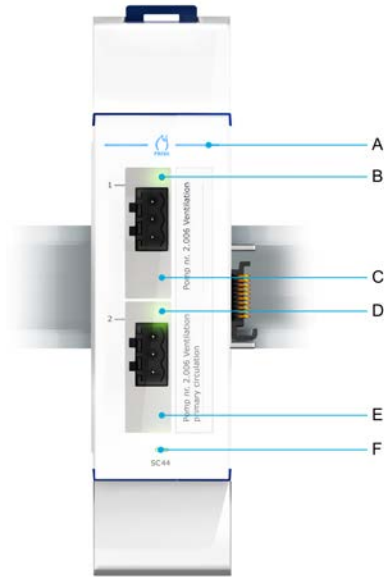
Hot swappable

A module can easily be removed from and placed back in the base without tools. This can be done live (hot swappable).

Electrical isolation

The module's ports are electrically isolated from the system neutral. In addition the RS485 ports are electrically isolated from each other.

Clear indication



Legend

A	Priva Blue ID Lifeline
B	LED for status of port RS485-1
C	port RS485-1
D	LED for status of port RS485-2
E	port RS485-2
F	LED for status of module

Priva Blue ID Lifeline

The modules are equipped with blue LEDs. Together, these LEDs form the Priva Blue ID Lifeline. If the blue line is continuously on, the modules and bases are in the correct place according to the configuration in TC Engineer.

LEDs for status of ports

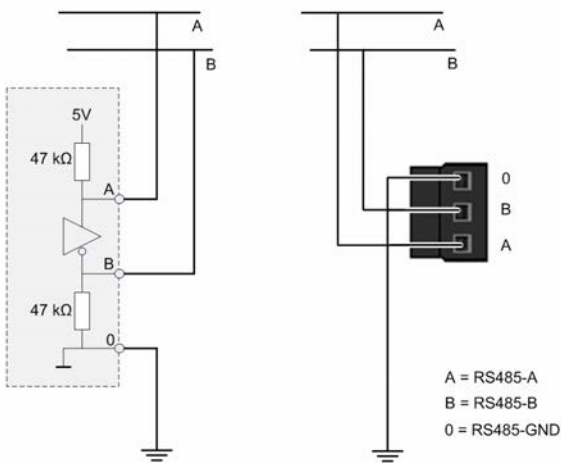
Per port, an LED clearly indicates the port's status. The LED is continuously green when the module is working. In other situations, the LED flashes or is off. In the event of a communication error, the LED is red as long as the error is present.

LED for status of module

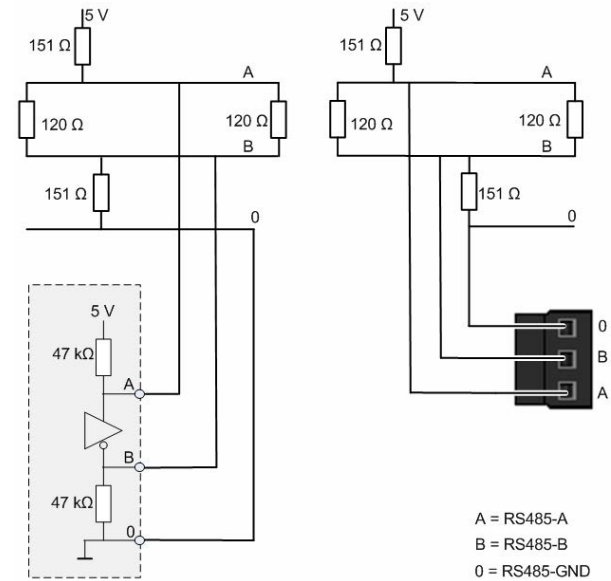
The LED shows the status of the module. The LED is on continuously when the module is working correctly. If not, and in special circumstances, the LED flashes.

Connection examples

Making a two-wire connection



Termination and connecting base circuit



SC44 module specifications

General	
Module article description	Priva Blue ID S-Line SC44 Communication module RS485
Module article number	5040001 (V03:01 and higher)
Base article description	Priva Blue ID S-Line SC Communication base
Base article number	5040101 (V01:00 and higher)
Number of RS485 ports	2
Dimensions (XYZ) ¹	161.5 x 40 x 100.2 mm (6.36 x 1.57 x 3.94 inches)
Weight	module: 110 grams base: 120 grams
Maximum power consumption	2.0 W
Typical power dissipation ²	1.7 W
MTBF ³	module: 4,380,000 hours base: 8,760,000 hours
Construction	removable module on a base
Mounting of base	clicks onto DIN rail
Material	mixture of polycarbonate and ABS

¹ Excluding 1.1 mm room between the modules

² Dissipation under the following conditions:

- I/O load of 50%
- Energy saving mode on (LEDs off)

³ The MTBF is calculated according to the *Telcordia SR-332 standard Issue 2* under the following conditions:

- ambient temperature: 35 ... 50 °C
- supply voltage: 24 VDC
- time in operation per day: 24 hours
- reliability level: 60 %







Communication	
Standard used	TIA/EIA-485
Bus load	1/2 Unit Load
Bias resistance	47 kΩ
Baud rates	1k2, 2k4, 4k8, 9k6, 19k2, 38k4, 57k6, 76k8 and 115k2 bps
Other parameters	number of data bits: 7, parity: even, odd number of data bits: 8, parity: none, even, odd number of stop bits: 1 or 2
Internal termination and bias circuit	no if required, equip the network with an external termination and bias circuit
Functional isolation of voltage between the ports mutually, and in relation to system neutral	240 V
Accuracy of internal temperature measurement	± 2 °C
Protection of ports	protected against incorrect connection of ± 30 VDC and 30 VAC
Cable type required	twisted pair
Cross section	0.2 – 2.5 mm ² (without ferrule connector) 0.25 – 2.5 mm ² (with ferrule connector)
Maximum cable length	500 m
Connector type (supplied 2 x)	three-pin pluggable screw connector with A, B and 0 connection
Indication	<ul style="list-style-type: none"> • Priva Blue ID Lifeline • red-green LEDs for status of ports • green LED for status of module

General specifications of controllers, modules and bases

Housing	
IP code	IP30 (IEC 60529)
Flammability class	V-0 (UL 94)
Recycle code	7
Colour	release surfaces of module and DIN rail release: blue (RAL5013) other parts: white (RAL9003)
Device type	open device, for use in a pollution degree 2 environment

Installation and connection	
Installation	<p>in control panel:</p> <ul style="list-style-type: none"> • accessible to authorized personnel only • can be clicked onto the DIN rail that is positioned horizontally or vertically on the mounting plate <p>Note: The controller, SC module and SN module may only be mounted horizontally.</p> <p>in panel door integration in control panel:</p> <ul style="list-style-type: none"> • accessible to authorized personnel only • can be clicked onto the DIN rail that is positioned horizontally on the mounting plate
DIN-rail type	35 x 7.5 mm (height x depth), in accordance with IEC 60715
Maximum width of I/O modules, bus extension modules and controller	20 mm

Environment	
Permitted temperature inside control cabinet during normal operation with horizontally mounted modules only (without airflow)	0 ... 50 °C
Permitted temperature inside control cabinet during normal operation with vertically mounted modules only (without airflow)	0 ... 35 °C
Permitted temperature during transport and storage	-20 ... 70 °C
Permitted relative ambient humidity	10 % ... 95 % (non-condensing)
Shock and vibration resistance	IEC 61131-2
Installation category	II

Legislation and standards	
Canada / USA	 <ul style="list-style-type: none"> • UL 508:2005 (industrial control equipment) • UL 916:2007 (energy management equipment) • UL 61010-1:2004 (measurement and control equipment) • CSA C22.2 No 14-10: 2011 (industrial control equipment) • CSA C22.2 No 205-12: 2012 (signal equipment) • CSA C22.2 No 61010-1-04 (measurement and control equipment)
	EMC <ul style="list-style-type: none"> • complies with 47 CFR Part 15 Subpart B, Class B (FCC Rules) Operation is subject to the following two conditions: <ol style="list-style-type: none"> 1. This system may not cause harmful interference. 2. This system must accept any interference received, including interference that may cause undesired operation. • ISM-system, complies with Canadian ICES-001
Europe	 <ul style="list-style-type: none"> • Low voltage directive 2006/95/CE: <ul style="list-style-type: none"> • EN 61010-1:2010 (measurement and control equipment) • EMC directive 2004/108/EC: <ul style="list-style-type: none"> • EN 61326-1:2006 (measurement and control equipment) • EN 61000-6-2:2005 (generic immunity standard) • EN 61000-6-3:2007 (generic emission standard) • RoHS directive 2011/65/EU
	 <p>complies with the WEEE directive 2002/96/EC</p>
International	 <ul style="list-style-type: none"> • The Priva Blue ID S10 Controller is BTL registered at BACnet International. • The Priva Blue ID S10 Controller is BACnet certified in accordance with ISO 16484-5/6. • Priva is a member of the BACnet Interest Group Europe.

Europe Office:
Priva
Zijlweg 3
P.O. Box 18
2678 ZG
De Lier
The Netherlands
www.priva.com
sales.building@priva.nl

UK Office:
Priva UK Ltd.
34 Clarendon Road

Watford WD17 1JJ
United Kingdom
www.priva.co.uk
sales@priva.co.uk

Canada Office:
Priva North America Inc.
3468 South Service Road
Vineland Station

Ontario LOR 2E0
Canada
www.priva.ca
contact.priva@priva.ca

Your Priva partner:

