DATA SHEET FT-20002-EN

HR RANGE READERS

SSCP V2 TRANSPARENT READERS

April 2, 2025

Readers in the HR range can simultaneously read the following Credentials in the Mifare® family: Mifare Classic and DESFire (EV1/ EV2/EV3). Their great adaptability makes it easy to extend, perform technological migrations or changes in security levels on your sites.

The HR range is available in three finishes:
- LEC05HR5000-NL5 : HR XS reader (narrow), cable output
- LEC05HR5200-NB5 : HR ST reader (large), terminal output
- LEC05HR5240-NB5: HR KB reader (with keyboard), terminal output

Installation precautions

Keep the reader as far away as possible from power cables (mains or high-voltage) and computer transmission cables, which can cause interference.

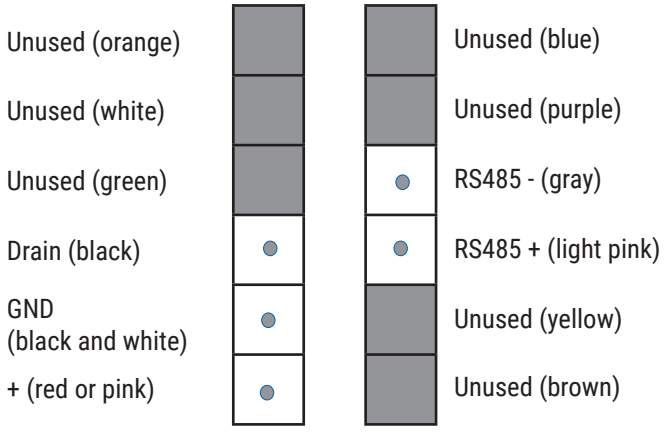
External dimensions (L x W x H)

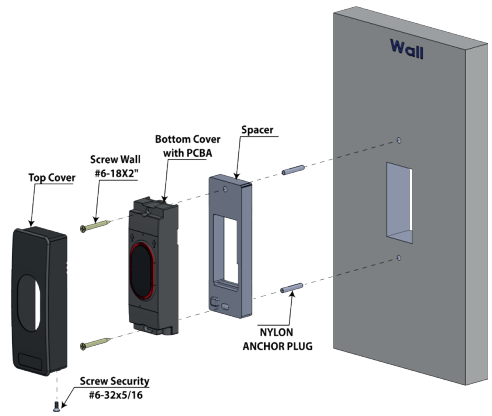
HR XS reader: 125 mm x 47 mm x 28 mm
HR ST reader: 125 mm x 83 mm x 28 mm
HR KB reader: 125 mm x 83 mm x 28 mm

Reader connection

The HR XS reader has a cable output:
- the black and white wires as well as the black wire are connected to GND
- the red or pink wire is connected to the + of the power supply
- the grey wire is connected to terminal B on the module (RS485 -)
- the light pink wire is connected to terminal A on the module (RS485 +)

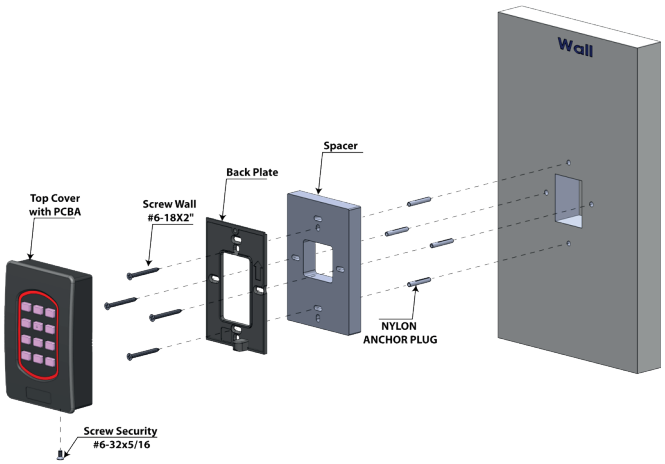
HR ST and HR KB readers have a 12-slot terminal block on the rear panel, of which only 5 are used, as shown on the diagram below.





The narrow model (XS), shown above, can be installed with a spacer (ref. SOC05HR1000-N). This spacer, fixed to the wall with 2 screws, is necessary for the operation of the infrared anti-tear device, and facilitates the installation of cables and connectors.

Models (ST and KB), shown below, can be installed with a spacer (ref. SOC05HR2000-N). This spacer, fixed to the wall with 4 screws, facilitates the installation of cables and connectors.



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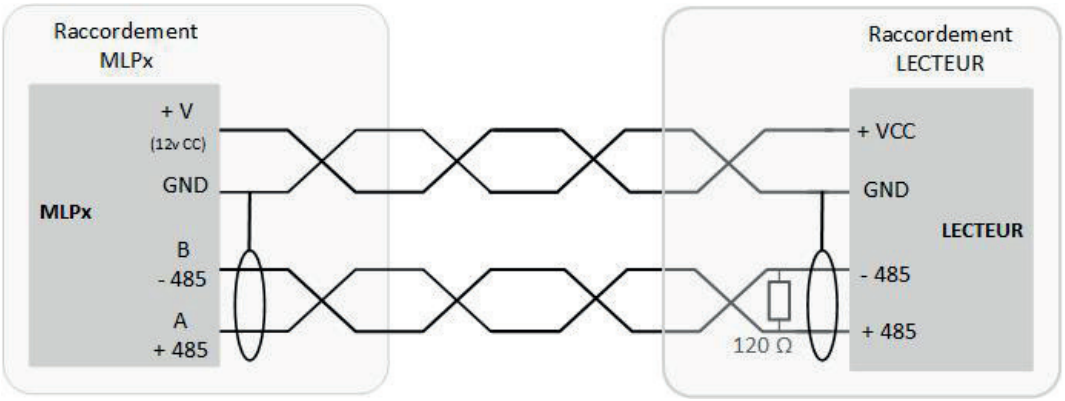
Non-contractual information subject to change without notice

Selection of reader communication protocol (TILLYS driver)

The reader communication protocol is selected via MICROSESAME or the TILLYS web interface.

Wiring recommendations

In order to prevent intrusion attempts by short-circuiting readers located in unsecured areas, we recommend protecting the reader's power supply with a dedicated fuse (e.g. 500 mA).



Main Features

Supply voltage	6 to 16 VDC
Average consumption at 12 V	XS reader XS 65 to 90 mA (peaks at 100 mA) ST reader 60 to 75 mA (peaks at 90 mA) KB reader 85 to 115 mA (peaks at 120 mA)
Communication interface	RS485 transparent SSCP V2 protocol
Connections	XS reader XS: cable ST and KB readers: plug-in terminal block (2 connectors supplied)
Connection distance	300 m maximum between module and reader (using cable 22AWG STP or higher)
Protections	Infrared sensor detects pull-out Life signal
Mounting	Wall-mounted or on 60 and 62 mm flush-mounted boxes (except for narrow reader), on any type of surface (including metal) without need for a spacer
RFID badge technology	13.56 MHz - ISO14443 A, ISO14443 B
Reading distance	Between 2.5 cm and 5 cm (depending on badge technology and reader shape)
TILLYS driver	74 (Scan Global, Bluetooth, 125 kHz and QR Code options disabled)
Customizable signals	RGB LEDs : 7 colors available Integrated, controllable buzzer
Materials	Black polycarbonate, UL 94
Shock resistance	IK10 certification
Water and dust protection	XS reader IP67 (molded cable) ST and KB readers IP65 (but for connectors)
Working temperature	-35 °C to +66 °C
Working humidity	5% to 95%
Weight	XS reader 142 g ST reader 290 g KB reader 310 g
Standards and certifications	FCC, UL 294, CE, IC, RCM, RoHS, REACH, UKCA, GSA APL FIPS 201-13.02