

# SLG FRE 9200-E/-USB

## Passive UHF Multi Protocol Mid Range Reader



### Product description:

- The FRE 9200-E/-USB reader identifies UHF transponders within a frequency range from 865 to 928 MHz and so it can be used in Europe and in the USA.
- The reader is suitable for application fields like retail, industry, Supply Chain, logistics etc.
- It is a very flexible and cost effective reader which is aimed for UHF applications, operating with a medium reading range (1 – 2,5 meters) and a reduced RF transmitting power (max. 0.3 W).
- FRE 9200 is available as a LAN variant (FRE 9200-E) and as an USB variant (FRE 9200-USB). Both variants also offer a RS232 interface, the USB variant a RS485, additionally. So the connectivity to several host systems is possible.

### RF key features:

- A powerful RF interface to work with maximum speed in European or US DRM (Dense Reader Mode)
- RF front end with blocking features supports adjacent channel operation of RF Readers.
- Reader protection against various fault conditions, such as antenna shortcut and electrostatic discharge.
- Reader is available in different versions to fulfill the different national radio rules of UHF.

### Features:

- Wide variety of ETSI- and FCC certified antenna configurations with reading ranges depending on the RF transmitting power between 1 meter (0,1 W) and 2,5 meters (0,3 W)
- Multi-tag Reader (EPC Gen2, opt. ISO 18000-6-B/-C) with various interface options
- High speed anti-collision function identifies large quantity of tags. Buffered Read Mode and Notification channel function provides data filtering and buffering.
- Connection of one or two external antennas



| Technical specification |  |  |
|-------------------------|--|--|
| Version                 | FRE 9200-E   | FRE 9200-USB                                     |
| Housing:                | Die-case aluminum, powder-coated, lockable hinged cover  |  |
| Dimensions (W x H x D): | 200 mm x 110 mm x 60 mm  |  |
| Weight:                 | 1.200 g  |  |
| Protection class:       | IP 54  |  |
| Power supply:           | 12 – 24 V DC +/- 15%   |  |
| Power consumption:      | max. 15 VA   |  |
| Operating frequency:    | - EU version: 865,6 – 867,6 MHz (200 kHz steps)<br>- FCC version: 902 – 928 MHz (500 kHz steps)            |  |
| Transmitting power:     | 0,1 W, 0,2 W or 0,3 W +/- 1dB  |  |
| Data rates:             | <ul> <li>Dense Reader Mode EU – 50kbps / 80kbps</li> <li>Dense Reader Mode US – 50kbps / 64kbps</li> </ul> |  |
| Antenna connection:     | 2 x SMA-connector (50 Ohm); Multiplexer integrated   |  |
| RF Diagnostics:         | Antenna SWR control, Internal overheating control  |  |
| Outputs:                | - 2 x Optocoupler: 24 V DC / 30mA<br>- 1 x Relay (1x NO/NC): 24 V DC / 2 A                                 |  |
| Inputs:                 | 2 x Optocoupler: max. 24 V DC / 20mA   |  |
| Interfaces:             | RS232<br>LAN (802.3)   | RS232 & RS485<br>USB                             |
| Protocol-Modes:         | FEIG ISO HOST<br>Buffered Read Mode<br>Scan Mode<br>Notification Mode                                      | FEIG ISO HOST<br>Buffered Read Mode<br>Scan Mode |
| Supported transponders  | EPC Gen2; opt. ISO18000 6 B/ C   |  |
| Indicators:             | 4 LED (for diagnosis of the operating status)  |  |
| Temperature range:      | - Operation: -20°C up to + 55°C<br>- Storage: -25°C up to+ 85°C  |  |
| Relative humidity:      | 5 - 80% (non condensing)   |  |
| Standard conformity:    |  |  |
| - Radio license:        | - Europe: EN 302208, EN 300220<br>- USA: FCC 47 CFR Part 15  |  |
| - EMC:                  | - EN 301 489   |  |
| - Safety:               | - EN 60950   |  |
| - Vibration:            | - EN 60068-2-96<br>- 10 Hz to 150 Hz: 0,075 mm / 1g  |  |
| - Shock resistance:     | - EN 60068-2-27<br>- Acceleration: 30g   |  |
| Order number:           | E4002.000081   | E4002.000082                                     |