# SLG FRE 9200i-E/-USB

## Passive UHF Multi Protocol Mid Range Reader with integrated antenna


### Product description:

- With two integrated antennas the FRE 9200i-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 especially suitable for identification applications like process control, automatisation, textile and pharmaceutical industry.
- Specific feature of this reader is the combination of two different functional principles, inductive coupling and backscatter coupling in one device.
- The Near Field Antenna is necessary to identify midget UHF transponders, reducing negative influences of liquids by using backscatter coupling. The Far Field Antenna will be used for process control within automatisation, especially.
- Due to the integrated multiplexer, parallel operation of both antennas is possible.
- The reader FRE 9200i-E/-USB is offered in an elegant plastic housing as Ethernet and USB variant and is available as ETSI or FCC reader. Both variants have a RS232 interface and the USB variant an additional RS485/RS422 interface.

### Features:

- 2 integrated antennas (Near & Far Field); parallel use is possible by multiplexer on board
- Low Power Mode for limitation of reading range
- Multi-tag Reader (EPC Gen2, opt. ISO 18000-B/-C) with several interface options
- High speed anti-collision function identifies large quantity of tags. Buffered Read Mode and Notification channel function provides data filtering and buffering.
- Available as ETSI- or FCC variants

| Technical specification | | |
|---|---|---|
| **Version** | **FRE 9200i-E** | **FRE 9200i-USB** |
| **Housing:** | ABS plastic housing with lockable hinged cover | |
| **Color:** | RA 7035 (similar light grey) | |
| **Dimensions (W x H x D):** | 200 mm x 110 mm x 60 mm | |
| **Weight:** | 650 g | |
| **Protection class:** | IP 54 | |
| **Power supply:** | - 12 – 24 V DC +/- 5%<br>- Noise Ripple: max. 150 mV | |
| **Power consumption:** | max. 15 VA | |
| **Operating frequency:** | - 865,6 – 867,6 MHz (EN 302208)<br>- 902 – 928 MHz (FCC CFR 47 Part 15.247) | |
| **Transmitting power:** | - 50...300 mW (adjustable via software)<br>- Low Power Mode | |
| **Antennas:** | - integrated Near Field Antenna<br>- integrated Far Field Antenna | |
| **Outputs:** | - 2 x Optocoupler: 24 V DC / 30mA<br>- 1 x Relay (1x NO/NC): 24 V DC / 2 A | |
| **Inputs:** | 1 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 | FEIG ISO HOST<br>Buffered Read Mode<br>Scan Mode |
| **Supported transponders** | - EPC Class 1 Gen2<br>- ISO18000-6-C (Upgrade Code mandatory)<br>- ISO 18000-6-B only on request | |
| **Indicators:** | 4 LED (for diagnosis of the operating status) | |
| **Temperature range:** | - Operation: -20°C up to + 45°C<br>- Storage: -25°C up to+ 85°C | |
| **Relative humidity:** | 5 - 80% (non condensing) | |
| **Standard conformity:** | | |
| **- Radio license:** | - Europe: EN 302208<br>- USA: FCC 47 CFR Part 15 | |
| **- EMC:** | - EN 301 489 | |
| **- Safety:** | - Low voltage: EN 60950<br>- Human Exposure: En 50364 | |
| **- Vibration:** | - EN 60068-2-6<br>- 10 Hz to 150 Hz: 0,075 mm / 1g | |
| **- Shock resistance:** | - EN 60068-2-27<br>- Acceleration: 30g | |
| **Order number:** | **E4001.000210.BF** | **E4001.000211.BF** |