ELLIOTT DATA SYSTEMS, INC.

FEIG ELECTRONIC

**ID MAX.U500i**

# UHF Vehicle Access Control Reader

- Combination of UHF Long Range Reader with integrated antenna and Access Controller
- Management of nearly 9.000 vehicles
- Simultaneous monitoring of up to 2 lanes with read ranges of up to 8 m
- Non-volatile event memory, buffered real time clock and Teach-in-mode
- Anti Passback
- Integrated signal light (red/green)
- Secure Key Storage (Secure Element)
- Fast and easy mounting and installation
- PoE and USB interface


**Top Performance**

The reader is ideal for vehicle identification and parking access control applications in airports, universities, gated communities and others.

The small vehicle access control reader is installed next to the barrier, gate or bollard, allowing vehicles to conveniently enter the parking area without the need of stopping at the entry.

ID MAX.U500i is a compact UHF Vehicle Access Control Reader that combines a UHF Long Range Reader with integrated antenna, a signal light and an access controller in one device. The cabinet approach of this fail-safe solution ensures ease of installation and maintenance. Place of use is everywhere where vehicles should be granted permanent access to employee parking lots, driveways to companies, authorities or other closed facilities (Perimeter Protection).

For identification of a vehicle in connection with the ID MAX.U500i passive, maintenance-free UHF transponders are used, which can be stuck behind the windscreen of the vehicle. ID MAX.U500i has a secure key store with full support of transponders with encryption techniques according to EPC Class 1 Gen 2 V2 specification like NXP UCODE DNA to provide maximum security of your application. This allows a secure authentication of detected transponders and prohibits access of transponders with cloned serial numbers.

With ID MAX.U500i nearly 9.000 access permissions can be managed and approx. 3.000 access control events can be stored. Each user can be assigned to additional temporal access parameters. For this, there are 15 user-definable time zones available. Holidays and vacation days can be included, easily.

To monitor multiple lanes or the simultaneous checking of entry and exit, there are one antenna port and two digital outputs available, alternatively two relays as signal transmitter for barrier- or gate control units.

**Programming & Administration**

Using the free software myAXXESS Manager, user data and access parameters can be easily administrated on a PC and transferred to ID MAX.U500i by using a temporary network connection. After the transfer of user data, the reader can run offline as a stand-alone device.

With the help of a USB stick, the event buffer as well as the entire configuration including the access authorization can be read out on the ID MAX.U500i. The simple "configuration cloning" allows this configuration to be conveniently copied to other devices by the same route.

The "Teach-In Mode" is used to teach the transponders to be accessed without the use of the software. If the reader is in this mode, all read transponders are automatically transferred to the access database.

**Loop detectors and motion detectors as useful accessories**

Loop detectors and motion detectors as pulse for starting the identification process do not only ensure an energy efficient operation of ID MAX.U500i. They also guarantee that always the right barrier or door is opened when several lanes exist. For this ID MAX.U500i offers a digital input.

Suitable loop detectors and motion detectors are available from FEIG ELECTRONIC.

Perimeter Protection:
Fast and safe access to industrial plants etc.

Parking Management:
Comfortable access without waiting

## UHF Vehicle Access Control Reader with integrated antenna and signal light

Small and powerful UHF RAIN RFID Long Range Reader with
integrated Access Controller for automatic vehicle identification (AVI).

| Product details | ID MAX.U500i |
|---|---|

### Mechanical Data

| | |
|---|---|
| Housing | Plastic (ASA-PC), Aluminium |
| Dimensions | 290 mm x 290 mm x 100 mm<br>(11.4 x 11.4 x 3.9 inch) |
| Weight | 2.800 g |
| Mounting | VESA FDMI MIS-D<br>100 mm x 100 mm |
| Protection Class | IP 65 |
| Colour | Anthracite, translucent |

### Electrical Data

| | |
|---|---|
| Power Supply | 12...24 V DC (±10%), PoE+ |
| Power Consumption | typical 22 W |
| Operating Frequency | |
| - Variant EU: | 865 MHz up to 868 MHz |
| - Variant FCC: | 902 MHz up to 928 MHz |
| Output Power | 100 mW to max. 1 W,<br>configurable in steps of 100 mW |
| Antenna Connector for external antenna | 1x R-TNC-Jack (50 Ω)<br>(Reverse-TNC) |
| RF-Diagnosis | RF-channel monitoring,<br>Antenna SWR control,<br>Internal Overheating Protection |
| Outputs | |
| - 2 Optocoupler | max. 24 V DC / 20 mA |
| - 2 Relays | max. 24 V DC / 1 A switching<br>current, 2 A permanent current |
| Inputs | |
| - 2 Optocoupler | max. 24 V DC / 20 mA |
| Interfaces | Ethernet, USB (On-The-Go) |

### Features

| | |
|---|---|
| Supported transponder types | RAIN RFID<br>EPC Class1 Gen2<br>EPC Class1 Gen2 V2<br>ISO 18000-6-C<br>ISO 18000-63 |
| Indicator | Signal light with red/green/blue<br>10 LEDs to indicate operation<br>and antenna state |
| Other Features | Battery-assisted real-time clock,<br>Supports encrypted transponder<br>communikation,<br>Secure Key Storage,<br>Config Cloning function |

### Environmental Conditions

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|---|---|
| Temperature range | |
| - Operation | -25° C up to 55° C |
| - Storage | -25° C up to 85° C |
| Humidity | 5% to 95% (non-condensing) |
| Vibration | EN 60068-2-6<br>10 Hz to 150 Hz: 0,075 mm / 1g |
| Shock | EN 60068-2-27<br>Acceleration: 30 g |

### Applicable Standards

| | |
|---|---|
| Radio Regulation | |
| - Europe | EN 302 208 |
| - USA | FCC 47 CFR Part 15 |
| - Canada | IC RSS-GEN, RSS-210 |
| - India | BIS IS 13252 Part 1 |
| EMC | EN 301 489 |
| Safety | |
| - Low Voltage | EN 62368 |
| - Human Exposure | EN 50364 |
| Others | RoHS, WEEE |

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The information in this document is subject to change without notice and shall not be construed as a commitment.


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