

# i-PORT F310 ISO/IEC 18000-7 Fixed Interrogator



Interrogators from the i-PORT F310 ISO/IEC 18000-7 series are the newest development in IDEN TEC SOLUTIONS' Intelligent Long Range® (ILR®) interrogators, based on the ISO/IEC 18000-7 standard.

ILR provides highly accurate, real-time data collection without human intervention in wireless applications such as:

- identification
- and tracking and tracing of assets and personnel.

Using advanced UHF radio frequency technology, the i-PORT transmits and receives data at distances over 100 meters (300 feet) utilizing integrated antenna.

The standardized anti-collision multi-tag-handling algorithm allows communication to transponders even when thousands of transponders are within the interrogator's read zone.

Combined with other IDEN TEC SOLUTIONS ILR system components, the interrogators from the i-PORT F310 ISO/IEC 18000-7 series offer a leading-edge wireless, automated data collection tool that is easily integrated into advanced information systems.

The software integrated in the interrogator contains a variety of features such as preprocessing of data and communication with i-Q310 ISO/IEC 18000-7 transponders. The result is real-time information, where and when it is needed.

## Features

- 100-meters (300 ft) read/write range
- 433 MHz operating frequency
- ISO / IEC 18000-7 compatible
- Adjustable power output
- 100 tags/sec. identification rate
- 128KB of non-volatile memory
- i-BUS (RS 422 or RS485) and RS232
- LED for power indication
- Easy attachment

## Benefits

- Allows automated identification, tracking and tracing of assets without human intervention.
- Allows low-power, long communication range and high data transmission rates with minimal interference due to local conditions.
- Manufacturer independent interoperation. US DoD and NATO ITV compatible.
- Ability to adjust the read/write range of i-Q310 ISO/IEC 18000-7 transponders for a range of <1m (3 ft) to more than 100 meters (300 ft).
- Provides reliable identification of fast-moving objects.
- Large memory for interrogator configuration.
- Permits daisy-chaining of several interrogators to a host interface; also provides for only one connection to power supply and data transmission (RS232).
- Easily visible power indication to show interrogator status ON/OFF.
- Mounting kit for easy and secure attachment to any structure.

## IDENDEC SOLUTIONS

IDENDEC SOLUTIONS is a leading global supplier of innovative RFID systems (Radio Frequency Identification) with communication ranges of up to 100 m.

With its unique Intelligent Long Range® (ILR®) technology, IDENDEC SOLUTIONS offers innovative and economical solutions for automated data gathering, identification, tracking and localization of objects.

ILR® technology makes it possible to ensure that

- the right goods,
- in the right amounts,
- in the right condition,
- with the right information
- are located at the right place
- at the right time,

leading to increased efficiency and quality improvements in Production, Logistics and Supply Chain Management. To learn more about how ILR® technology can increase efficiency of your business, contact IDENDEC SOLUTIONS or visit our website at [www.identecsolutions.com](http://www.identecsolutions.com).

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This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:  
(1) This device may not cause harmful interference, and  
(2) This device must accept any interference received, including interference that may cause undesired operation.

## Technical Specifications

|                        |  |
|------------------------|--|
| <b>Compatibility</b>   | ILR® i-Q310 ISO 18000-7 Transponders                     |
| <b>Performance</b>     |  |
| Read/Write range       | Exceeds 100m (300ft)                                     |
| <b>Communication</b>   |  |
| Frequency              | 433.92MHz  |
| Certification          | ISO/IEC 18000-7  |
| Data rate up/download  | 27.778 kbit/s  |
| Number of antennas     | 1 (Embedded)   |
| Transmit power         | ≤ 0 dBm, digitally adjustable                            |
| Transmission safeguard | 16 bit CRC   |
| Sensitivity            | -95 dBm  |
| <b>CPU</b>             |  |
| Program memory         | 2 MB Flash   |
| Configuration memory   | Up to 128 KB   |
| <b>Interfaces</b>      |  |
| Host interface         | Ethernet, RS232, RS485 (IN and OUT)                      |
| Status display         | 5 LEDs (ANT, RUN, BUS, ERR, ETH)                         |
| <b>Electrical</b>      |  |
| Power source           | 10 – 30 VDC, 90 – 260 VAC, 47 – 63 Hz AC                 |
| Input power            | Maximum 15W when 3 additional devices are daisy chained. |
| Single Device          | 2.5W at 115VAC, 5.0W at 230VAC, 2.0W at 24VDC            |
| <b>Environmental</b>   |  |
| Operating temperature  | -30° C to +60° C (-22°F to +158°F)                       |
| Storage temperature    | -40° C to +70° C (-40°F to +176°F)                       |
| Humidity               | 90% non-condensing                                       |
| Package rating         | IP64   |
| <b>Physical</b>        |  |
| Dimensions             |  |
| w/o mounting bracket   | 14.06 in. × 9.33 in. × 2.78 in. (357mm × 237mm × 70.5mm) |
| with mounting bracket  | 14.06 in × 9.33 in × 5.24 in (357mm x 237mm x 133mm)     |
| Case material          | PC / ABS with UV inhibitors, UL 94 V0                    |
| Weight                 | 1500 g   |

**WARNING: Changes or modifications not expressly approved by manufacturer could void the user's authority to operate the equipment**

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