

# i-PORT F310 ISO/IEC 18000-7 Transportable 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
- AC, DC and Battery powered

## 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.
- Utilizes rechargeable battery as well as power from various sources and includes all necessary cables and adapters for powering from a vehicle electrical system.

## 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

### Compatibility

ILR® i-Q310 ISO/IEC 18000-7 Transponders

### Performance

Read/Write range Exceeds 100m (300ft)

### Communication

Frequency 433.92 MHz  
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

### CPU

Program memory 2 MB Flash  
Configuration memory Up to 128 KB

### Interfaces

Host interface Ethernet, RS232, RS485 (IN and OUT)  
Status display 5 LEDs (ANT, RUN, BUS, ERR, ETH)

### Electrical

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

### Environmental

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

### Physical

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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