

# INfinity 510



## FEATURES

- Best-in-class worldwide high-performance reader platform.
- Awarded EPCglobal's Gen 2 hardware certification and interoperability marks and certified for Dense Reader Mode operation, the INfinity 510 was designed to address the complexities of global business entities.
- A true network device offering easy enterprise integration and a rich applications environment that can be customized to meet the needs of the end user.

## INfinity 510

Ultra High Frequency 860 – 960 MHz  
High-Performance, Multi-Protocol Reader

### Overview

Supporting the worldwide movement to Gen 2 technology, the INfinity 510 redefines the state-of-the-art for RFID readers. This powerful UHF reader system is designed for enterprise class applications and features best-in-class air interface performance. In addition, the robust, software radio-based architecture provides a rich application platform that addresses the needs of today's deployments and ensures that future features and capabilities can be added as RFID technology evolves in the future.

The INfinity 510 was designed from the ground up to support worldwide regulatory compliance from a single platform. The design provides optimal performance in North American, European and Asia-Pacific environments. The INfinity 510 offers a wide portfolio of configuration and enterprise management tools that changes the paradigm of RFID system installation and management. For the end-user who needs a quick, out-of-the box solution, the INfinity 510 provides an intuitive installation wizard allowing the user to be able to begin reading tags within minutes.

### Applications

With its exceptional read rate performance and 4 main monostatic antennas, the INfinity 510 easily integrates into most supply chain and closed loop UHF installations including dock door portals and conveyor systems but can also be used for applications including forklifts, point-of-sale, access control and many others.



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# INfinity 510

## High-Performance, Multi-Protocol Reader



### Operating Characteristics

Management Features:	Rich array of diagnostic and statistical reporting tools, user-configurable alarms, and a host of management features based on industry standard protocols. Allows seamless integration into existing IT infrastructures.
Regional Compatibility:	The IN510 is operationally compatible in the following regions: Australia, Brazil, Canada, China, Europe, Hong Kong, Japan, Korea, Malaysia, New Zealand, Singapore, South Africa, Taiwan, Thailand, United States
Air Interface:	High performance radio and modem subsystems employing sophisticated DSP technology and advanced singulation algorithms that optimize read rates in a wide range of end-user applications.
Adaptive Noise Features:	Intelligent algorithms within the INfinity 510 automatically enable the modem to adapt to the instantaneous noise and interference level, thus optimizing air interface performance and robustness for a wide range of deployment scenarios.
Upgradeability:	Upgradeable firmware permits forward compatibility for future protocols.

### Specifications

Frequency:	UHF 860 MHz to 960 MHz
Supported Transponders:	Full support of mandatory and optional features of EPCGlobal Class 1 Generation 2 and ISO18000-6C, including optional user memory and NXP's EPC custom commands. Also supports ISO 18000-6B, IPX, and Ucode 1.19 with future protocols supported through firmware updates.
Operating Modes:	Single Interrogator Multiple Interrogator Dense Interrogator
Communications:	10/100 Ethernet Port Serial Port EIA/TIA-232-F 115 kBaud with hardware handshaking (RTS/CTS), DCE
GPIO:	Digital Input/Output Port 4 – optically coupled inputs, 25V max. Controllable input reference 4 – open-collector outputs, 3-40V, 100mA max, 1W max
RF Power:	+30 dBm, conducted (FCC)
Input Power:	12 to 24 Vdc (13W at idle; 34W typical (40W max) at max RF Power) 85 to 265 Vac, 50-60 Hz (optional)
Antenna Connection:	4 - RP-TNC connections (reverse polarity) Fifth RP-TNC connection for LBT functionality
LED Indicators:	Sense, Transmit, Fault and Power
Upgradeable Firmware:	Yes
Operating Temperature:	-20°C to 60°C (-7°F to 140°F)
Relative Humidity:	5 to 95%, non-condensing
Dimensions (LxWxD):	22.0 x 30.0 x 5.6 cm (8.66 x 11.81 x 2.20 in.)
Weight:	3.0 kg (6.5 lbs) `
Regulatory:	Maxim SHA-1 Authentication, RoHS, EPCglobal, FCC Part 15, IC RSS-210, EN 300 220-3 v1.1.1, EN 301 489-1 v1.4.1, EN 301 489-3 v1.4.1, EN 302 208-2 v1.1.1, EN 50364:2001, EN 60950-1:2001, EN55022 (Class A), EN55024, EN61000-(3-2, 3-3), EN61000-(4-2, 4-3, 4-4, 4-6) and other country standards through firmware updates.
Case Material:	Aluminum

### About Sirit Inc.

Sirit Inc. (TSX: SI) is a leading provider of Radio Frequency Identification (RFID) reader technology to OEMs and solution providers worldwide. Harnessing the power of Sirit's enabling-RFID technology, customers are able to more rapidly bring high quality RFID solutions to the market with reduced initial engineering costs. Sirit's products are built on more than 16 years of RF domain expertise addressing multiple frequencies (LF/HF/UHF), multiple protocols and are compliant with global standards. Sirit's broad portfolio of products and capabilities are easily customized to address new and traditional RFID market applications including Supply Chain & Logistics, Cashless Payment, Access Control, Automatic Vehicle Identification, Inventory Control & Management, Asset Tracking and Product Authentication. For more information, visit [www.sirit.com](http://www.sirit.com).

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Products bearing the Gen 2 Hardware Compliance Certification Mark have been rigorously tested and comply with the EPCglobal standards.



Products bearing the Gen 2 Hardware Interoperability Certification Mark have been rigorously tested and comply with the EPCglobal standards to work with other compliance-certified tags, readers or printer/encoders.