

# INfinity 510



## INfinity 510 ETSI

Ultra High Frequency 865 - 868MHz

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 four 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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## 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, Barbados, Colombia, Peru
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 865-868 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:	10 mW - 724 mW conducted (+28.6 dBm)
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 55°C (-7°F to 131°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:	Compliant to RoHS, ETSI EN 301 489, ETSI EN 302 208 and IEC 60950
Case Material:	Aluminum

### About Sirit Inc.

Sirit Inc. 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 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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The "RFID by Sirit" symbol signifies that Sirit Inc.'s high quality RFID reader technology resides within this product.

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