sirit
vision beyond sight™

IN*finity* 168

High Frequency 13.56 MHz
RFID & Smart Label OEM Reader Module

Overview

The IN*finity* 168 is a versatile RFID reader component that supports most leading 13.56 MHz tags and smart labels. Based on the popular Sirit IN*finity* 166 reader, the IN*finity* 168 reader module has been modified to meet specific OEM requirements. Its compact design provides versatility and easy integration within a wide range of industrial automation products.

Connection to the IN*finity* 168 is made via a single connector, which provides the board with power and provides an easy way to connect to existing devices. In addition, to enable future upgrading of new tag types and code enhancements, firmware can be flash upgraded through the serial interface. This permits the product to be easily updated in its surrounding environment.

Applications

Typical applications for the IN*finity* 168 include industrial printers for the programming of smart labels at source, non life-critical medical applications, product verification and access control.

INfinity 168
13.56 MHz RFID & Smart Label Reader Module

Performance Characteristics

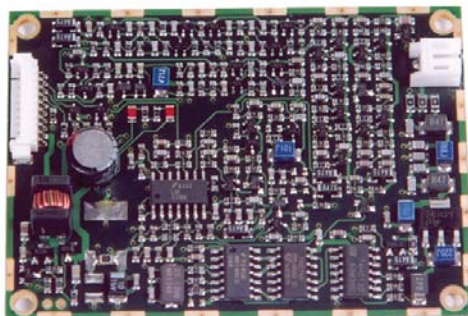|	
Frequency:	HF Band, 13.56 MHz
Supported Transponders:	ISO 15693, Inside PicoTag, Philips UID, Philips I•CODE, Microchip MCRF355/360, TI-RFID Tag-it, EPCglobal HF
Communications Protocol:	Serial packet based with proprietary error detection
Communications Parameters:	57600, 38400, 19200, 9600 (factory set)
Communications Signal Level:	RS-232 and TTL level (factory set)
Interface Connector:	Single 10-way Molex connector for power and communications
Antenna Type:	External. Impedance: 50 ohms at 13.56 MHz, Q: 10 - 25)
Upgradeable Firmware:	Yes

Physical Characteristics

Dimensions (LxWxD):	70.0 x 51.5 x 12.3 mm (2.76 x 2.03 x 0.48 in.)
Weight:	18 g (0.63 oz.)
Mounting:	4 corner-mounted holes of 2.8 mm (0.11 in.)

Environment

Operating Temperature:	0°C to +80°C (32°F to 176°F)
Storage Temperature:	-40°C to +85°C (-40°F to 185°F)
Relative Humidity:	80%, non-condensing
Power:	
Input Voltage:	+5 VDC ±.2 VDC, <50 mV ripple
Active Current:	200 mA (antenna dependent)
Standby Current:	Negligible
Idle:	60 mA
RF Output Power:	200 mW max
Regulatory:	EN 300 330-1 (radio type approval), EN 300 489-3 (EMC), Pre compliance to FCC part 15

Model:

INfinity 168 HF Reader Module

For more information,
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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 13 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.

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

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