



## 3M™ Compact RFID Reader 1000

Ultra High Frequency 922–928 MHz  
High-Performance, Multi-Protocol Reader

# 3M™ Compact RFID Reader 1000

## Overview

This powerful yet compact 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.

Designed with parking and gated entrances in mind, the Compact RFID Reader 1000 line has models supporting frequencies and communications standards worldwide. The 922-928 MHz model is suitable for operation within Taiwan and other regions compatible with FCC regulations. The Compact RFID Reader 1000 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, this reader provides an intuitive installation wizard allowing the user to be able to begin reading tags within minutes.

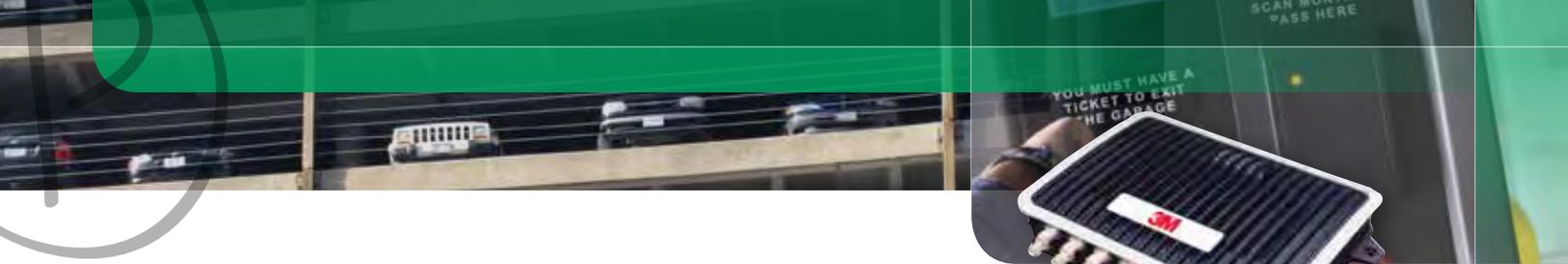
## Applications

The Compact RFID Reader 1000 is available in 4- and 8-port versions. Eight port models can support up to eight antennas in mono-static mode or four bi-static (4x2), while the four port device supports four mono-static or two bi-static antennas. The Compact RFID Reader 1000 easily integrates into most parking and closed loop UHF installations including access control systems as well as small tolling applications and many others.

## 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:	Regions compatible with FCC regulations.
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 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.





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### Specifications

Frequency:	UHF 922 to 928 MHz
Operating Modes:	Single Interrogator Multiple Interrogator Dense Interrogator
Communications:	10/100 Ethernet Port USB1.1 Type B port Serial Port EIA/TIA-232-F 115 kBaud with hardware handshaking (RTS/CTS)
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:	24VDC. 10W idle, 18W typical (20W maximum) at 30dBm.
Antenna Connection:	RP-TNC connectors. (reverse polarity)
LED Indicators:	Power, Activity, Environment/User, Status
Upgradeable Firmware:	Yes
Operating Temperature:	-20°C to 55°C (-7°F to 131°F)
Relative Humidity:	5 to 95%, non-condensing
Dimensions (LxWxD):	9.72 X 7.25 X 2.2 in (246.7 X 184.15 X 55.6 mm)
Weight:	4.5 lbs (2.1 kgs)
Regulatory:	Compliant to RoHS, FCC Part 15, IC RSS 210, and IEC 60950
Case Material:	Aluminum

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