New PCMCIA Card RFID Reader Delivers 1 Watt Transmit Power

Growing use of RFID has created a need for higher power and small form factor in PCMCIA Type II Card-based readers

A 1.0 watt PCMCIA Type II RFID reader card has been introduced by WJ Communications, Inc. The MPR7000 builds on the success of the earlier MPR5000 and MPR6000 PC Card readers, offering higher power for applications where read range and small size are both critical requirements.

The MPR7000 implements the EPC Class 0, Class 1 and Class 0+ protocols and is upgradeable to UHF Gen 2 functionality via a firmware upgrade.

WJ Communications' new 1-watt power output MPR7000 expands the company's RFID reader product line.

Product Description

The 1.0 W MPR7000 RFID Card operates over the UHF frequency band (902-928 MHz) and includes the analog RF, digital circuitry and embedded firmware required for EPC Class 0, EPC Class 1 and 0+ operation. The modular design is flexible, and a simple firmware upgrade is all that is required to incorporate future standards—like UHF Gen 2—and new features.

Power supply requirements are 5 VDC nominal with 300 mA average current, 1500 mA peak. The specified operating temperature range is 0 to 40ºC. The unit includes two separate antennas via two 50 ohm MMCX coaxial connectors. The MPR7000 is FCC Part 15 Certified.

The MPR7000 leverages the common PCMCIA Type II package but with serial communications and separate bias power connections. Plug it into a PCMCIA Type II socket wired for serial communications and operate it via a simple WJ GUI program that is pro-

vided with the unit. WJ's simple but powerful command set allows for fast creation of custom applications via an open-source DLL. The MPR7000 enables a host of reader and programmer solutions and is designed for integration in handhelds, printers, smart packaging, material handling and industrial products for today and the future.

WJ Communications, Inc. provides radio frequency solutions for wireless communications, RFID, broadband cable, and defense and homeland security markets. WJ products include amplifiers, mixers, RFICs, RFID reader modules, chipsets and multi-chip (MCM) modules.

WJ Communications, Inc.
401 River Oaks Pkwy.
San Jose, CA 95134
Tel: 408-577-6200
www.wj.com
HFeLink 302