Product Profile

IF2

Network Reader

- **Advanced performance in a compact and cost-effective design**
- **Easily deployed and managed on common networks**
- **Low cost per read point for superior ROI**
- **Choice of Power over Ethernet lowers cost of installation**
- **Directly monitors and controls peripherals without extra equipment**
- **Factory configurable to operate in world regions supporting FCC or ETSI frequency bands**

The Intermec IF2 is a compact, cost-effective network reader designed to support diverse RFID applications in both enterprise and industrial environments that require a scalable RFID system with a low cost per read point.

The IF2 is based on an Intermec-designed radio frequency (RF) platform that offers best-in-class read performance and includes support for Intermec's exclusive Advanced RFID Extensions (ARX), helping customers achieve a new level of visibility to the identification of RFID tags for greater accuracy of reading tags of interest over readers utilizing less-versatile commodity chipsets.

Packaged in a small and lightweight, yet durable enclosure, the IF2 is suited for nearly any environment, including industrial warehouse and manufacturing operations and enterprise environments for asset and inventory management applications.

Reduces System and Deployment Costs for Large and Small Installations

With a focus on keeping the cost of ancillary equipment and installation low, the IF2 Network Reader includes features that reduce the costs and complexity of the overall solution.

Not only does the low-profile enclosure with integrated mounting slots allow the IF2 to be easily installed in virtually any environment, the IF2 also supports Power over Ethernet (PoE) for scalable deployments without the cost of adding electrical drops where AC line power is not available or practical. An optional DC converter is available to support conventional wall power. Either power method supports the full RF output power capability of the IF2 (up to 30 dBm).

Because the general purpose input/output (GPIO) circuitry can be powered directly through either PoE or the DC power converter, the IF2 allows for direct monitoring and controlling of peripherals such as presence detectors and signal lights without requiring extra devices and power supplies to facilitate the connection.

Further reducing installation and equipment costs, the IF2's four antenna ports can be configured to transmit in either mono- or bi-static mode, increasing the flexibility of the system to achieve the best results for the application and environment. A variety of antennas from Intermec's extensive product line supports diverse applications, versus integrated antenna readers that include one type of antenna and limit the flexibility of applications and deployment.

Intermec

Easy to Use and Manage

The IF2 supports standard network device protocols, including auto-discovery and network service protocols, enabling seamless integration with common network infrastructures.

Supporting the standards-based LLRP application interface, the IF2 can quickly integrate with business solutions such as IBM® WebSphere® RFID and Microsoft® BizTalk® RFID, providing a scalable standardized platform for the development, deployment, and management of RFID solutions. The IF2 also supports Intermec's easy to use Basic Reader Interface (BRI), enabling Intermec customers and partners to quickly and seamlessly include the IF2 in their solutions.

The IF2 comes factory-loaded with the Intermec SmartSystems™ client at no extra charge. Intermec SmartSystems Foundation allows administrators to change device settings, send firmware upgrades, update software applications, and execute other changes on multiple devices directly from a centralized console to save time and cost for deploying, configuring, and maintaining the Intermec hardware.

Intermec's Advanced Services can provide process analysis, site analysis, installation and an 18-month guarantee of system performance.

In support of global operations, the IF2 is certified in regions across the globe and is factory configured to operate in the corresponding RFID frequency band.

General Description
The IF2 is a compact, cost-effective network reader designed to support diverse passive UHF RFID applications in both enterprise and industrial environments. The IF2 supports Power over Ethernet, four mono- or bi-static RF ports, built-in powered general purpose input output (GPIO) control, and both standards-based LLRP and Intermec's easy to use Basic Radio Interface (BRI) application interfaces, enabling scalable low-cost deployments for improved return on investment (ROI). The IF2 is packaged in a durable enclosure for nearly any environment and is factory configured to operate in regions across the globe.

Physical Characteristics
Length: 18.85 cm (7.42 in)
Length w/splashguard: 19.9 cm (7.87 in)
Width: 16.31 cm (6.42 in)
Height: 4.32 cm (1.70 in)
Weight: 1.0 kg (2.2 lbs)
LED Status Indicators: RFID service, power, PoE, Ethernet, tag detection, and antenna port connection status

Environmental
Operating Temperature: -20 to 50°C (-4 to 122°F)
Storage Temperature: -30 to 70°C (-22 to 158°F)
Relative Humidity: 5% to 95% (non-condensing)
Enclosure: IP53 sealing
Die cast magnesium base, Lexan plastic cover

Connectivity
Communications: 10/100 BaseT Ethernet
RS-232, USB for configuration
Input Power: PoE (802.3at compliant)
DC power input (12 VDC +/-5%, 30W), sealed/locking connection. Requires optional Intermec 100/240 VAC converter.

General Purpose
Input/Output (GPIO): Four input (0-40 VDC) and four output (0-48 VDC, 0.25 amp) circuits, powered via PoE or DC input (500 mA, 12 VDC)

RF Characteristics
Antenna Connections: Four reverse-polarity (RP) TNC ports configurable for mono- or bi- static operation. Antenna fault detection and auto tuning for best performance
Output Power: 1 to 30 dBm, configurable in 1 dB steps (calibrated above 9 dBm)
Frequency Ranges: FCC (902-928 MHz) and ETSI (865-868 MHz), factory configured

Software Platform
Passive UHF Tag Protocols:
ISO 18000-6B
ISO 18000-6C
EPCglobal UHF Class 1 Gen 2
Tag Features:
NXP G2X, Impinj Monza 4QT extensions
High memory tags (Fujitsu, Tego, ATA)
Host Application Protocols:
EPCglobal LLRP
Intermec Advanced RFID Extensions (ARX)
Intermec Basic Reader Interface (BRI)
Intermec Developer Library (IDL) resource kit for BRI (Java, C# .NET)
Management and Configuration:
Bonjour
Universal Plug and Play (UPnP)
Intermec SmartSystems client
Intermec Web Services and Web Configuration Interface
Network Protocols:
HTTP/HTTPS Web Server
IPv4, IPv6
DHCP, DNS, NTP, Syslog

Security
FIPS 140-2 compliance for HTTPS, LLRP-secure, and Web Services (DCWS)-secure
RADIUS client support
SSL Certificate support

Accessories
Intermec approved antennas, antenna cables

Regulatory Approvals and Compliance
Model: 1009FF01
Safety: IEC/UL 60950-1
EMC: Class B – FCC/ICES/EN

Intermec Global Services Support
www.intermec.com --> Support --> Knowledge Central
Telephone support available in the USA & Canada (+1-800-755-5505). Outside of this area, contact your local representative.

Restrictions on Use
Some approvals and features may vary by country and may change without notice. Please check with your local Intermec sales office for further information.

North America Corporate Headquarters
6001 36th Avenue West
Everett, Washington 98203
Phone: (425) 348-2600
Fax: (425) 355-9551

North Latin America Headquarters Office
Mexico
Phone: +52 55 52-41-48-00
Fax: +52 55 52-11-81-21

South Latin America Headquarters Office
Brazil
Phone: +55 11 3711-6776
Fax: +55 11 5502-6780

Europe/Middle East & Africa Headquarters Office
Reading, United Kingdom
Phone: +44 118 923 0800
Fax: +44 118 923 0801

Asia Pacific Headquarters Office
Singapore
Phone: +65 6303 2100
Fax: +65 6303 2199

Internet
www.intermec.com
Worldwide Locations:
www.intermec.com/locations

Sales
Toll Free NA: (800) 934-3163
Toll in NA: (425) 348-2726
Freephone ROW:
00 800 4488 8844
Toll ROW: +44 134 435 0296

OEM Sales
Phone: (425) 348-2762

Media Sales
Phone: (513) 874-5882

Customer Service and Support
Toll Free NA: (800) 755-5505
Toll in NA: (425) 356-1799

Copyright © 2011 Intermec Technologies Corporation. All rights reserved. Intermec is a registered trademark of Intermec Technologies Corporation. All other trademarks are the property of their respective owners. Printed in the U.S.A.

612043-01C 05/11

In a continuing effort to improve our products, Intermec Technologies Corporation reserves the right to change specifications and features without prior notice.