



In-Reach 7000

The In-Reach 7000 (IR-7000) series of alarm management solutions provides total control of a variety of discrete alarm devices used at manufacturing facilities, large data centers, outside plant street cabinets, controlled environment vaults (CEVs) and other unmanned sites.

The alarm points of the IR-7000 are connected to bi-state relay devices such as door alarms, uninterruptible power supplies (UPS) and aerial lights of cellular towers. These alarm points receive and distribute discrete alarm signals from normally opened or closed dry contact closures.

OPERATION

The relay interfaces of discrete alarm devices are connected to the alarm points of the IR-7000. This connection enables corporate network administrators and operations support systems (OS) managers to monitor and control the alarm devices from a central network operations center (NOC). The In-Reach operating system software enables each IR-7000 physical port to represent pairs of scan and distribution points. The scan points accept discrete input signals generated when contact closure devices such as aerial lights or door alarms change state.

The distribution points are also capable of sending output signals to activate devices such as generators or fire alarms in response to any alarm signal the scan point receives. Typical output current levels do not exceed 25 mA at +/- 2.5 Volts (min) or +/- 6 Volts (max).

When used with the automated response to alarm feature, the IR-7000 can be deployed for unmanned, automatic fault management of mission-critical applications.

HIGH PORT DENSITY

The IR-7000 series comprises a variety of standalone models ranging from 4 to 40 ports. These cost and space-saving 1U rackmount and 2U enhanced rackmount models offer from 8 to 80 alarm points at very affordable prices.

In addition, the IR-7000 series offers a wide spectrum of models with DC power, integrated modem, flash card and NEBS-compliant combinations.

FEATURES

- 8 to 80 alarm points
- 1 Ethernet 10BaseT RJ-45 port for network connectivity
- V.90 internal modem (model-specific)
- 1U rackmount (19/23")
- Automated response to alarm conditions
- Per-port, multi-level password protection
- PPP, PAP, CHAP, Secure Shell, SecurID, IP filtering, RADIUS, ACLs
- -48 VDC power
- Flash card for easy installation and upgrades

BENEFITS

- Proactive fault management, out-of-band access
- Increased service revenue, customer retention
- Cost savings as a result of reduced on-site visits
- Robust security
- Simple, centralized OSS fault management
- Unmanned alarm management
- Uninterrupted service provisioning

Datasheet

SNMP COMPATIBLE

The SNMP-compatible IR-7000 operates efficiently in heterogeneous network environments and can be managed by any industry standard, SNMP-compliant network management system (NMS).

Further, the IR-7000 can be configured to send SNMP traps to the NMS in response to alarm events and thereby alert the administrator to perform any time sensitive remedial operations.

SCALABLE SOFTWARE

Feature rich In-Reach alarm management software offers extensive scalability by using the same operating system image across all standalone and chassis form-factor models, resulting in the simplified management of thousands of alarm devices. Furthermore, the In-Reach software offers an intuitive CLI for installation, configuration, maintenance and troubleshooting.

The In-Reach software, with its robust security and proactive fault management features, enables the efficient management of widely dispersed alarm devices.

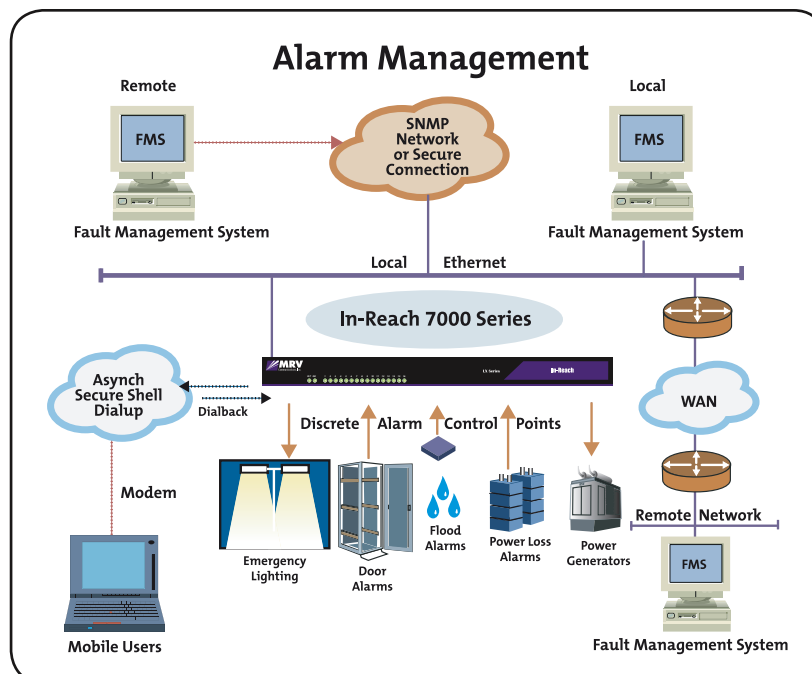
SECURITY

To add to your peace of mind, the IR-7000 offers a variety of built-in security features such as per port and multilevel

password protection, access control lists (ACLs), IP filtering, SecurID, RADIUS, dial-back and PPP (PAP, CHAP). In addition, support for the industry standard Secure Shell (version 1.5) serves as a highly secure alternative to nonsecure Telnet access and prevents unauthorized intrusion during out-of-band access. This package of robust security features comes standard with the In-Reach alarm management software and is unmatched in the industry.

AUTOMATED RESPONSE TO ALARM CONDITIONS

The automated response to alarm conditions feature in the In-Reach software facilitates timely, intelligent and unmanned alarm device management. Using this feature, network/OSS managers can define specific alarm trigger conditions and associate them with corresponding remedial actions. Consequently, any defined trigger condition that occurs at an alarm point automatically activates the corresponding action. With the provision to define as many as 255 trigger conditions and 255 actions, the intelligent self-healing feature enhances the reliability and availability of mission critical networks and ensures predictable fault management.



Datasheet

OUT-OF-BAND MANAGEMENT

Wherever you are, you can be in reach of your network using the extensive out-of-band management features of the IR-7000. The IR-7000 allows you to perform installation, configuration, management and troubleshooting of your network elements (NEs). The IR-7000 connected to your out-of-band management network can be accessed through a variety of standard interfaces, such as 10BaseT Ethernet (RJ-45) or PPP-compatible integrated (or external) V.90 modem. These interfaces allow network administrators to gain out-of-band access to their NEs quickly and reliably via TCP/IP Telnet, Secure Shell and PPP dial-up.

SERVICE AND SUPPORT

Delivering value added service and support for nearly 20 years, MRV Communications provides worldwide technical assistance through a highly trained team of dedicated corporate and field based engineers as well as through certified channel partners. Whether your needs are for 24x7 dedicated support, same day replacement parts shipment, on-site support or network design and installation related professional services, you'll gain the opportunity to build a responsive and accountable partnership with the MRV service and support experts.

Technical Specifications

Model Name	IR-7004	IR-7008	IR-7020	IR-7040
No. of Physical Ports	4	8	20	40
No. of Discrete Alarm Collection Scan Points (Input)	8	16	40	80
No. of Discrete Control Distribution Points (Output)	8	16	40	80
Distribution Point (Output) Current (Max)	25 mA	25 mA	25 mA	25 mA
Distribution Point (Output) Voltage	(+/-) 2.5 Volts (Min) or (+/-) 6 V (Max)	(+/-) 2.5 Volts (Min) or (+/-) 6 V (Max)	(+/-) 2.5 Volts (Min) or (+/-) 6 V (Max)	(+/-) 2.5 Volts (Min) or (+/-) 6 V (Max)
Rackmount Form Factor	Desktop	Desktop	1U rackmount (19/23")	1U rackmount (19/23")
Port Speeds	50 bps to 115.2 kbps	50 bps to 115.2 kbps	50 bps to 115.2 kbps	50 bps to 115.2 kbps
Power Requirements (DC)	-36 to -72 VDC 2A (max)	-36 to -72 VDC 2A (max)	-36 to -72 VDC 3.3A (max)	-36 to -72 VDC 3.3A (max)
Power Requirements (AC)	100 - 250 VAC, 50-60 Hz 0.7 A at 120 V (max) 0.3 A at 220 V (max)	100 - 250 VAC, 50-60 Hz 0.7 A at 120 V (max) 0.3 A at 220 V (max)	100 - 240 VAC, 50-60 Hz 1.58 A at 110 V (max) 0.85 A at 220 V (max)	100 - 240 VAC, 50-60 Hz 1.58 A at 110 V (max) 0.85A at 220 V (max)
Physical Dimensions				
Height	4.1 cm/1.62 in	4.1 cm/1.62 in	4.45 cm/1.75 in	4.45 cm/1.75 in
Width	23.3 cm/9.9 in	23.3 cm/9.9 in	48.26 cm/19 in	48.26 cm/19 in
Depth	19.5 cm/7.7 in	19.5 cm/7.7 in	29.71 cm/11.7 in	29.71 cm/11.7 in
Physical Weight	1.7 kg/3.8 lbs with external power supply	1.7 kg/3.8 lbs with external power supply	3.5 kg/8 lbs	5.4 kg/12 lbs

Datasheet

Technical Specifications

Common Specifications for all Units

Network Interface	Ethernet/IEEE 802.3 AUI (10Base5) or RJ-45 (10BaseT) one port
Serial Interface	RS-423/232, Modular RJ-45 connectors
Base Memory	4 MB DRAM
Expansion Memory	Can be upgraded in the field by qualified personnel in 2 MB increments for a total of 8 MB (6 MB on IR-7004 and IR-7008)
Memory Card	Interface JEIDA/PCMCIA
Non-Volatile Storage	32 KB
Network Protocols	TCP/IP, PPP, Telnet, BOOTP/TFTP
Security Options	Per-port password, multi-level password, RADIUS, ACLs, PAP, CHAP, IP filtering, SecurID, Secure Shell
Network Management	SNMP MIB I, MIB II, proprietary MIB extensions, Telnet
Warranty	One year

Environment

Operating Temperature	32 to 113°F (0 to 45°C)
Storage Temperature	-4 to 140°F (-20 to 60°C)
Humidity	10% to 90% non-condensing
Diagnostic LEDs	Run, LAN, console, port status, memory card status
Safety Compliance	Complies with UL 1950, third edition; CSA C22.2 No. 950; EN 60950
Emissions/Immunity Compliance	FCC Part 15, Class B; EN 55022; EN55024; EN50082-1
EU Directives	Meets all applicable requirements of current EU directives
NEBS Compliance	NEBS Level 3 compliant (GR-1089-CORE, GR-63-CORE), FCC Part 68, IC CS 03, CTR 21 (applicable to specific 20 and 40 port models)
Modem Models	NEBS compliance for modem models is in process. All modem models are FCC part 68, IC CS 03 and CTR 21 compliant.

MRV has more than 50 offices throughout the world. Addresses, phone numbers and fax numbers are listed at www.mrv.com. Please e-mail us at sales@mrv.com or call us for assistance.

MRV Los Angeles
20415 Nordhoff St.
Chatsworth, CA 91311
800-338-5316
818-773-0900

MRV Boston
295 Foster St.
Littleton, MA 01460
800-338-5316
978-952-4700

MRV International
Business Park Moerfelden
Waldeckerstrasse 13
64546 Moerfelden-Walldorf
Germany
Tel. (49) 6105/2070
Fax (49) 6105/207-100

All statements, technical information and recommendations related to the products herein are based upon information believed to be reliable or accurate. However, the accuracy or completeness thereof is not guaranteed, and no responsibility is assumed for any inaccuracies. Please contact MRV Communications for more information. MRV Communications and the MRV Communications logo are trademarks of MRV Communications, Inc. Other trademarks are the property of their respective holders.