DATA SHEET

IMACS 200: Compact Integrated Multiple Access Communication Server

Features

- Voice, data, control & monitoring interfaces in a single, 2U high device
- IEEE 1613 certified with optional IEEE C37.94 optical interfaces for deployment in harsh environments
- Flexible powering options: -48 VDC, 125 VDC or 120/220 VAC with optional redundancy
- Powerful system maintenance features with same "Look & Feel" as existing IMACS platform
- Optimized for electrical utility sub-station applications
- Low initial first cost
- RoHS compliant

Overview

The concept of an integrated one box solution for advanced voice and data applications began with the introduction of the IMACS. The IMACS 200 carries on that tradition with an integrated solution optimized for smaller port size applications that the IMACS could not economically address. An array of the most popular interfaces and features from the IMACS has been bundled into a small 2U chassis providing the ultimate in ease of installation.

Reliable communications are vital to any organization. The IMACS 200 addresses this need while providing compact size, low cost, and a high level of voice and data integration. This makes it an ideal choice for providing a variety of services to small end points and remote locations in any modern telecommunications network.

Optimized for the unique needs of electric utilities, the IMACS 200 system supports a wide range of specialty traffic, including teleprotection (EIA-232 and IEEE C37.94 optical interface to protection relays), SCADA, surveillance video, substation automation and alarms, radio, Ethernet and telephony.

In power substations, one of the biggest issues an access system must deal with is EMI from all the high voltage power equipment that is co-located. The IMACS-200 Optical WAN (OWAN) eliminates this problem by transporting the WAN facilities over DS1/E1 equivalent optical fibers. The OWAN can work up to 20 kilometers over a single mode, 1320nm, bi-directional optical port.

The IMACS 200 system offers a powerful array of integrated network diagnostic and fault isolation capabilities. These include Bit Error Rate Testers, test tone and signaling state generation, digital and analog loop back-support, and remote configuration and control. IMACS 200 meets stringent standards criteria, such as IEEE 1613, RoHS, and CE, which means you can deploy it anywhere in your network.

Specifications

WEIGHT & DIMENSIONS

~10 lbs. (4.54 kg) depending on configuration
- 47 in. x 17.31 in. x 9.48 in.
- 8 cm x 44.0 cm x 24.1 cm

POWER

Power Supply Options

- -48 VDC
- 125 VDC
- 120/220 VAC

Optional redundant power supplies

INTERFACES

- 4 – T1/E1
- 4 – 4 Wire E&M/TO
- 4 – 2 Wire FXS (600 ohm)
- 2 – V.35 (n x DS0)
- 5 – RS-232 (2.4, 4.8, 19.2, 28.8 and 38.4 kbps)
- 4 – alarm inputs
- 4 – alarm outputs (dry contacts)
- 1 – 10BaseT Ethernet
- 2 – IEEE C37.94 compliant serial data over fiber (optional)
- 2 – Optical T1/E1 WAN, Single fiber, 8 Mbps (optional)

STANDARDS SUPPORT

- IEEE 1613
- RoHS
- AT&T PUB 43801
- ITU-T G712
- TR62411

Voice

- 4 Wire E&M/TO
- 2 Wire FXS

PROTOCOL SUPPORT

- Ethernet IEEE 802.3
- RFC 1490 – Encapsulation
- ARP and RIP routing
- V.35
- RS 232
- IEEE C37.94

REGULATORY COMPLIANCE

Safety:

- United States – UL 60950-1
- Canada – CSA C2.22 No. 60950-1
- European Union – EN 60950-1
- International/CB – IEC 60950-1 3rd Edition

EMC:

- United States – FCC Part 15 Class A
- Canada – ICES-03

European Union / CE Mark:

- ETSI EN 300 386:2001:
- EN 55022 Class A
- EN 6100-4-2
- EN 6100-4-3
- EN 6100-4-4
- EN 6100-4-5
- EN 6100-4-6
- EN 6100-3-2 – N/A for DC
- EN 6100-3-3 – N/A for DC

MANAGEMENT

- RS-232 Serial VT-100 port
- Ethernet Port
- Command Line Interface (Menu based)
- SNMP V2
- Telnet
- MegaSys Telenium EMS Manager

Ordering Information

MODEL	DESCRIPTION
IMACS-200-48VDC	Base IMACS 200 System w/ a single -48 VDC power supply
IMACS-200-RDNT-48VDC	IMACS 200 System w/ redundant -48 VDC power supplies
IMACS-200-RDNT-48VDC-OHSU	IMACS 200 System w/ redundant -48 VDC power supplies and two C37.94 optical ports
IMACS-200-RDNT-48VDC+125VDC	IMACS-200 System w/ redundant one - 48VDC supply and one 125VDC supply
IMACS-200-AC	Base IMACS 200 System w/ a single 120/220 VAC power supply
IMACS-200-RDNT-AC	IMACS 200 System w/ redundant 120/220 VAC power supplies
IMACS-200-RDNT-AC+125VDC	IMACS-200, System w/ redundant one 120/220 VAC supply and one 125VDC supply
IMACS-200-RDNT-AC-48VDC	IMACS-200, System w/ redundant ONE 120/220 VAC supply and one 48VDC supply
IMACS-200-RDNT-125VDC	IMACS 200 System w/ redundant 125 VDC power supplies
IMACS-200-RDNT-125VDC-OHSU	IMACS 200 System w/ redundant 125 VDC power supplies and two C37.94 optical ports

MODELS WITH OPTICAL WAN (OWAN)

MODEL	DESCRIPTION
IMACS-200-RDNT-48VDC-OW	IMACS 200 System w/ redundant -48 VDC power supplies and optical WAN
IMACS-200-RDNT-48VDC-OHSU-OW	IMACS 200 System w/ redundant -48 VDC power supplies and two C37.94 optical ports and optical WAN
IMACS-200-AC-OHSU-OW	IMACS 200 System w/ a single 120/220 VAC power supply and two C37.94 optical ports and optical WAN
IMACS-200-RDNT-AC-OHSU-OW	IMACS 200 System w/ redundant 120/220 VAC power supplies and two C37.94 optical ports and optical WAN
IMACS-200-RDNT-125VDC-OHSU-OW	IMACS 200 System w/ redundant 125 VDC power supplies and two C37.94 optical ports and optical WAN