

# IMACS 200

## Compact Integrated Multiple Access Communication Server

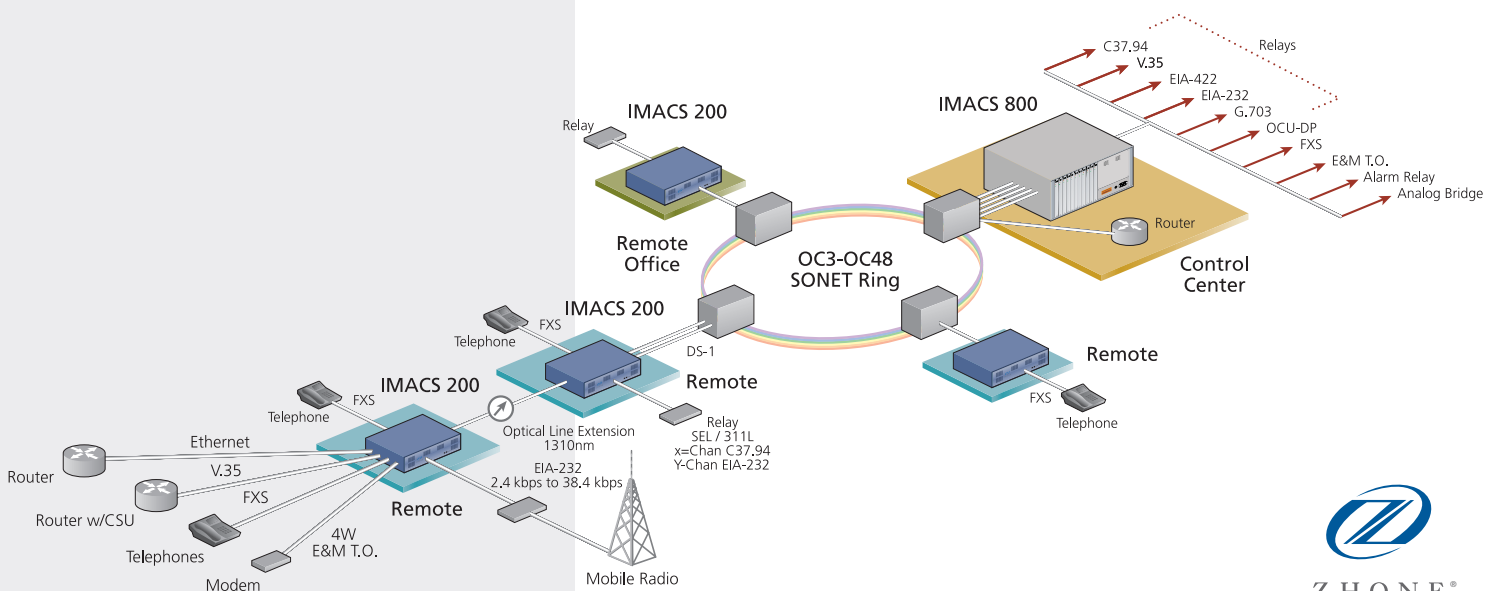
### TDM Intelligent Channel Bank with Built in Cross Connect

- ✓ *Digital Non-Blocking Cross-Connect*
- ✓ *Flexible Support for Voice, Data, Control, and Monitoring Interfaces in a Single Device*
- ✓ *Optimized for Electrical Utility Sub-station Applications*
- ✓ *Easy to Deploy*
- ✓ *IEEE C37.94 Optical Interface to Protection Relays*
- ✓ *IEEE 1613 Certified – Including Temperature Hardening*
- ✓ *Powerful System Maintenance, Diagnostic, and Fault Isolation Capabilities Including LEDs, Loop Back, BERT, Automatic Diagnostics*



### 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.

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.

### Ordering Information

IMACS-200-48VDC	Base IMACS 200 System e/w a single -48 Vdc power supply
IMACS-200-RDNT-48VDC	IMACS 200 System e/w redundant -48 Vdc power supplies
IMACS-200-48VDC-OHSU	IMACS 200 System e/w a single -48 Vdc power supply and two C37.94 optical ports
IMACS-200-RDNT-48VDC-OHSU	IMACS 200 System e/w redundant -48 Vdc power supplies and two C37.94 optical ports
IMACS-200-AC	Base IMACS 200 System e/w a single 120/220 Vac power supply
IMACS-200-RDNT-AC	IMACS 200 System e/w redundant 120/220 Vac power supplies
IMACS-200-AC-OHSU	IMACS 200 System e/w a single 120/220 Vac power supply and two C37.94 optical ports
IMACS-200-RDNT-AC-OHSU	IMACS 200 System e/w redundant 120/220 Vac power supplies and two C37.94 optical ports
IMACS-200-125VDC	Base IMACS 200 System e/w a single 125 Vdc power supply
IMACS-200-RDNT-125VDC	IMACS 200 System e/w redundant 125 Vdc power supplies
IMACS-200-125VDC-OHSU	IMACS 200 System e/w a single 125 Vdc power supply and two C37.94 optical ports
IMACS-200-RDNT-125VDC-OHSU	IMACS 200 System e/w redundant 125 Vdc power supplies and two C37.94 optical ports

Specifications

Dimensions

- 3.47 in. x 17.31 in. x 9.48 in.
- 8.8 cm x 44.0 cm x 24.1 cm

Weight

- Approximately 10 lbs. (4.54 kg) depending on configuration

Power

- -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)
- 2 - IEEE C37.94 compliant serial data over fiber (optional)
- 1 - 10BaseT Ethernet
- 2 - Optical T1/E1 WAN, Single fiber, 8 Mbps (optional)

Standards Support

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

Voice Support

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

Protocol Support

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

Management

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

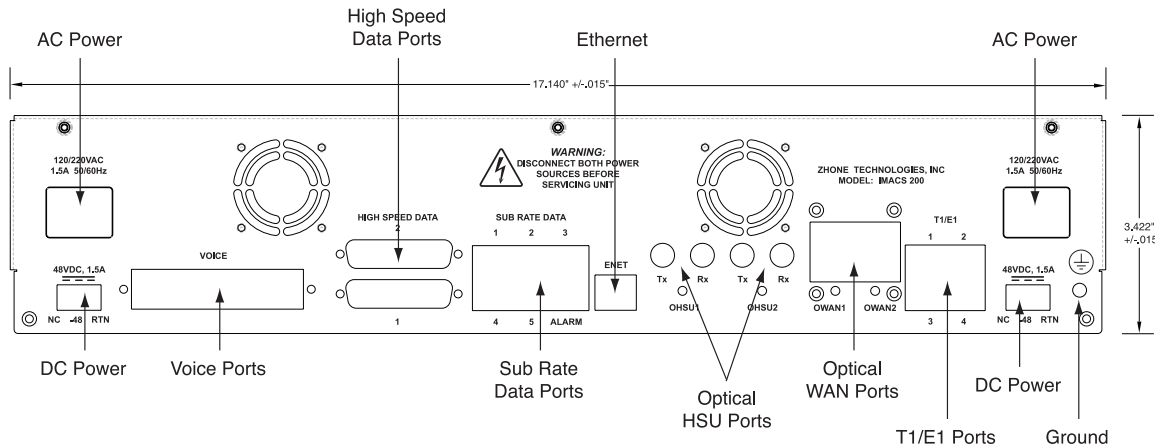
Regulatory Compliance

- Safety:
  - United States - UL 60950-1
  - Canada - CSA C2.22 No. 60950-1
  - European Union - EN 60950-1
  - International / CB Scheme - 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 which includes:
    - 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

Operating Requirements

- Temperature -40 °C to +70 °C
- Humidity 95 % max, non-condensing

IMACS 200



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About Zhone Technologies, Inc. (Zhone)

Zhone Technologies, Inc. (NASDAQ: ZHNE) is the first company dedicated solely to delivering the full spectrum of next-generation local loop access equipment. Zhone's multi service products allow carriers to concurrently deliver voice, new premium data and video services over copper or fiber access lines. Zhone provides carriers with an elegant migration from legacy circuit-based technology to packet-based networks while substantially reducing operating costs. With deployments at over 400 carriers including among some of the world's largest networks, Zhone has enabled carriers to reinvent their businesses.

For more information about Zhone and its products, please visit the Zhone Web site at [www.zhone.com](http://www.zhone.com) or e-mail [info@zhone.com](mailto:info@zhone.com)

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