DZS
EVERY CONNECTION MATTERS™

DATA SHEET

IMACS 3000

Features

- Over 50 Plug-In Modules for Voice, Data and IP NERC security features
- MegaSys Telenium management
- Optical HSU Interface to Protection relays (IEEE C37.94)
- WAN options: T1/E1 and PWE[3]

Overview

The concept of Integrated Access began with the introduction of the Integrated Multiple Access Communications Server; Premisys Communications' revolutionary IMACS. Initially, the IMACS was a vision that brought bandwidth savings for voice and data access. IMACS has not strayed from its vision and has remained the most exible, robust, and scalable integrated access solution in the telecommunications market today. In fact, DZS has continued to build on the promise to provide the most robust set of voice and data access services and applications on one manageable platform; the IMACS.

The IMACS, with many optional service application modules and ve exible and scalable chassis options, provides an almost limitless combination of services, applications and network interfaces.

The IMACS is unrivaled in its network versatility and supports V.35, V.11/X.21 and up to eight T1/E1 and Fractional T1/E1 WAN interfaces. An integrated digital cross-connect is available to consolidate multiple voice, data, and T1/E1 services. Five chassis models, IMACS 600, 800, 900, 8000 and the IMACS 3000 differ in their card capacity and card installation options (front, or front and rear). All models support the same range of modular cards and system redundancy options. All IMACS systems can be fully managed either with local craft interface through a VT100, PC, or through MegaSys Telenium Element Management System using standard SNMP interfaces. The IMACS 3000 has more efficient

power supply and ring generator offerings, and the IMACS 200 product is a hardened 2 rack unit product with a fixed form factor.

IMACS also offers a powerful array of integrated network diagnostic and fault isolation capabilities. These include Bit Error Rate Test (BERT), test tone and signaling state generation, digital and analog loopback support, and remote con guration and control. Because IMACS meets stringent standards criteria, including NEBS and CE, it can be deployed almost anywhere in your network.

With over 160,000 systems worldwide, the IMACS is designed to continuously meet the needs of a changing telecommunications landscape. With its advanced modular architecture, voice and data services can be deployed quickly and cost effectively. Applications include: POTS (FXS, FXO, E&M), voice compression (ADPCM), VPN access, Internet access, integrated routing capabilities, voice over Frame Relay, Digital Data Networks (DDN), analog private lines, and numerous others. The IMACS is being used in both public and private, as well as traditional facilities-based and wireless networks.

Now DASAN Zhone expands on the IMACS family product offering, by introducing the IMACS 3000!

Specifications

WEIGHT & DIMENSIONS

- Chassis Body: 17.4" (44.2 cm)
- Chassis Front 'Bump": 18.18" (46.17 cm)
- Chassis Height: 5.22" (13.26 cm)
- Chassis Depth, with handles: 17.56" (44.60 cm)
- Chassis Depth, without handles: 15.74" (39.98 cm)
- 18.4 lbs. (8.35 kg)

POWER

- Dual 48 VDC inputs
- Power draw depends on individual configuration
- Supplies provide 100 Watts of continuous DC power in a load-sharing configuration
- 4 AMP, 250V slow-blo fuse on each 48 VDC input

INTERFACES

- T1 or E1 (Up to 8)
- V.35, RS-530, RS-232, RS-449, RS-422, V.24, DDS, SLC96, 10BaseT
- Optical HSU (IEEE C37.94)
- 4-port Optical HSU
- IPR*4 PPP
- IPR*4 HDLC
- PWE[3]

STANDARDS SUPPORT

- ANSI 310-D
- GR-1089-core
- TR-TSY-000008
- IEC 297-1
- ITU-G703, G.704, G.732, G.735, G.736, G.823, G.824

VOICE

- Analog voice (FXS, FXO, E&M)
- Voice compression (ADPCM)

PROTOCOL SUPPORT

- NERC Security Features:

- 256 user assignable unique users
- Each user independently settable r/w privileges 16 different user groups
- RADIUS authentication
- SNTP time server
- Syslog
- Login logs
- Change logs

PROTOCOL SUPPORT

- Management Interfaces
  - Connectivity: modem, SLIP, PPP, FDL time slot 24 (T1) or SAA time slot 31 (E1), ISDN D- channel, frame relay PVC
  - SNMP
- MegaSys Management System using Telenium
  - Manages networks of IMACS
  - Centralized management
  - Point & click graphical user interface
  - Management of configurations, alarms, connectivity, diagnostics Multi-user environment
  - SNMP-baseD
  - Supports TELNET for emulation of craft interface IP addressing for node addresses
  - RS-232, VT-100 craft interface

OPERATING ENVIRONMENT

- Redundancy
  - Power supply
  - CPU
  - WAN interfaces ADPCM
  - Analog Bridge CPU-7 redundancy
- Clocking
  - Stratum 4
  - Sources: internal, T1, E1, digital interface, external clocking

MODULES				
MODEL	DESCRIPTION	IMACS 8000	IMACS 3000
PRM-801070	IMACS,WAN CARD,DUAL T1/E1, 8000-WAN-T1 8000-WAN-T1 DSX/CSU STRAP FOR T1	8000-WAN-T1	8000-WAN-T1

MODULES			
MODEL	**DESCRIPTION**	**IMACS 8000**	**IMACS 3000**
PRM-801070-E1	IMACS,WAN CARD,DUAL T1/E1, DSX/CSU STRAP FOR E1	8000-WAN-E1	8000-WAN-E1
PRM-801470	IMACS,WAN CARD,DUAL T1/E1, DSX/CSU, W/ RELAYS	8000-WAN-R-T1	8000-WAN-R-T1
PRM-801470-E1	IMACS,WAN CARD,DUAL T1/E1, DSX/CSU, W/ RELAYS STRAP FOR E1	8000-WAN-R-E1	8000-WAN-R-E1
PRM-810860	IMACS,E&M,2WX8P,SS	8000-EM-2W-8P	8000-EM-2W-8P
PRM-811960	IMACS,E&M,4WX8P,W/EJECT	8000-EM-4W-8P	8000-EM-4W-8P
PRM-812960	IMACS, FXS, 2WX8P, 600 OHM, SS	8000-FXS-8P	8000-FXS-8P
PRM-813970	IMACS,FXO,2W,8P,SS	8000-FXO-8P	8000-FXO-8P
PRM-820260	IMACS,HSU,RS530/V.35,SS		
PRM-820360	IMACS,HSU,2P,TRUNK/EIA-530,SS	8000-HSU-2P-V11	8000-HSU-2P-V11
PRM-821260	IMACS,HSU,2P,SS	8000-HSU-2P	8000-HSU-2P
PRM-821570	IMACS,HSU,4P,RS530,W/EJECT,SS	8000-HSU-4P	8000-HSU-4P
PRM-822060	IMACS,SRU,10P,W/EJECT		
PRM-822061	IMACS,SRU,10P,W/EJECT,SS		
PRM-822160	IMACS, SRU,10P, W/EJECT		
PRM-822570	IMACS,LOW DELAY SRU, 10 PORT	8000-LDSRU-10P	8000-LDSRU-10P
PRM-823870	IMACS, OPTICAL HSU, 4 PORT, 830NM, MULTIMODE	8000-OHSU-4P	8000-OHSU-4P
PRM-824160	IMACS,OCU-DP,5P,SS	8000-OCUDP-5P	8000-OCUDP-5P
PRM-824660	IMACS,OCU-DP,10P,SS	8000-OCUDP-10P	8000-OCUDP-10P
PRM-8249	IMACS,OCU-DP,2P		
PRM-825460	IMACS,DSO-DP,SS	8000-DS0DP-4P	8000-DS0DP-4P
PRM-840160	IMACS,ALARM,4P,SS	8000-ALARM-4P	8000-ALARM-4P

MODULES

MODEL	DESCRIPTION	IMACS 8000	IMACS 3000
PRM-880770	IMACS,CPU,XCON,7.X.Y HOST CODE, REDUNDANT	8000-CPU	8000-CPU
PRM-881360	PTO CONFIG – IMACS,MCC,128P,SS		
PRM-882570	IMACS, OC3 SERVER CARD	8000-OC3-PT2PT	8000-OC3-PT2PT
PRM-883275	PTO CONFIG – IMACS, ROUTER, 10/100BASE-T,PPP,8HS	8000-ROUTER-PPP-HS	8000-ROUTER-PPP-HS
PRM-883280	PTO CONFIG – IMACS, ROUTER,10/100BASE-T,HDLC	8000-ROUTER-HDLC	8000-ROUTER-HDLC
PRM-883570	PTO CONFIG – IMACS,PWE,SFP OR GIGE RJ45, 8 E1/T1 CAPACITY	8000-PWE	8000-PWE
PRM-885070	PTO CONFIG – IMACS, ANALOG BRIDGING SERVER CARD	8000-BRIDGE	8000-BRIDGE
PRM-887170	IMACS,ADPCM SERVER ,SS	8000-ADPCM	8000-ADPCM
PRM-8901	IMACS,P/S,AC,120-240V		
PRM-890220	IMACS,DC POWER SUPPLY		
PRM-8905	IMACS,P/S,110/220V-48VDC	PRM-8905	
PRM-890620	IMACS,RINGER	PRM-890620	
PRM-8907	IMACS,P/S,DC,24V		
PRM-892060	IMACS,I/F,8P,T1/E1,32K,W/MOD,SS		
PRM-892260	IMACS,I/F,8P,128K,NO MOD,SS		
PRM-892360	IMACS,I/F,8P,128K,SS		
PRM-892460	IMACS,I/F,128K,W/O MODEM,SS		
PRM-893270	IMACS, RDNT, I/F, EXT SYNC, 8P, NO MOD, SS	8000-IF+EXT	8000-IF+EXT
PRM-893370	IMACS, RDNT, I/F, 8P, MODEM, SS	8000-IF+MODEM	8000-IF+MODEM
PRM-893470	IMACS, RDNT, I/F, W/O MODEM,SS	8000-IF	8000-IF

MODULES			
MODEL	DESCRIPTION	IMACS 8000	IMACS 3000
	IMACS 8000,P/S,AC,120-240V, 135 WATT	8000-AC-135W	
	IMACS 8000,P/S,AC,120-240V,55 WATT	8000-AC-55W	
	IMACS 8000, FILLER PANEL, SS	8000-BLANK- FP	
	IMACS 8000,P/S,DC,48V,135 WATT	8000-DC-135W	
	IMACS 3000,P/S, DC 48V, 100 WATT		3000-PSU-DC
	IMACS 3000,RING GENERATOR, 5 REN		3000-RINGER
	IMACS 3000,RING GENERATOR, 5 REN		3000-RINGER
	IMACS 3000,CHASSIS FAN TRAY		3000- FANTRAY
	IMACS 3000,CARD BLANK		3000-CARD- BLANK

Ordering Information

MODEL	DESCRIPTION
3000-CARD-BLANK	IMACS 3000, BLANK CARD FOR USER / SERVER / WAN EMPTY SLOTS
3000-CHASSIS	IMACS 3000, 3RU, CHASSIS, 2 FANTRAYS, POWER INPUT BOARD, SET OF MOUNTING BRACKETS
3000-FANTRAY	IMACS 3000, CHASSIS FAN TRAY, REPLACEABLE AND SERVICABLE 4-FAN FOR FRONT OR REAR
3000-PSU-DC	IMACS 3000, -48VDC POWER SUPPLY
3000-PWR-IN	IMACS 3000, -48VDC POWER INPUT BOARD
3000-RINGER	IMACS 3000, RING GENERATOR, 5 REN
3000-RINGER-BLANK	IMACS 3000, BLANK FACEPLATE FOR SYSTEMS WITHOUT RINGER