DATA SHEET

IMACS Interface Cards

Features

- Provides physical connections for E1/TI WAN interfaces.
- 893x and 8000-IF cards are split, allowing maintenance without service interuption
- Range of Interface Cards to support low-end or high-end functionality
- Optional integral modem for remote connectivity.
- Serial port for local VTI00 access.
- Integral Nodal port for alarm activation of external reporting device.
- Integral computer port supports local printer or IP based management via SLIP/PPP
- On-board NVRAM for non volatile storage of system configuration in the 892x IF card series. In the 893x and 8000-IF series, this technology is moved to the CPU-7, allowing for virtually hitless upgrades
- External synchronization options

Overview

The interface cards provide all management and control communications connections to the system and traditionally contained the non-volatile RAM in which all configuration information is stored (NOTE: For CPU-7 based systems, the non-volatile RAM has been moved to the CPU, in order to deliver virtually hitless upgrades). The interface cards provide all communications, control, and network interfaces to the IMACS system. The use of nonvolatile RAM for configuration storage means that all configuration information is retained in case of system power loss or intentional power down. One interface card is required per system.

The control terminal port is used to connect a VT100 or compatible terminal to the IMACS system for node management and control purposes. The Control Terminal port presents an RJ48 female connector with a V24/V28 (RS232) DCE electrical interface. The port is set to VT100 mode for asynchronous operation at 9600 bps with 8 data bits, 1 stop bit, and no parity. The port supports an automatic logout feature after fifteen (15) minutes of inactivity.

The computer port (DB9) connects a local device for printing alarms or can be configured to support SLIP (Serial Line Internet Protocol) for transport of SNMP management information. The computer port presents a DB9 male connector with a V24/V28 (RS232) electrical interface. Note that on the 893x series of cards, this port has been replaced with a RJ45 port.

The function supported by the nodal port is to provide the form-C contact closure and the physical interface so that the ACO alarm may activate an external reporting device. The nodal port presents an RJ48 female connector with an RS485 electrical interface.

The Modem port is used to connect the Interface card's internal dial modem to a standard telephone line. This port may be used to log into the unit from a remote VT100 terminal or to send system alarms to a remote device. The modem port presents an RJ11 female connector.

The Interface card also provides a single RJ27 50-pin female craft connector on which to terminate all T1/E1 facilities. In the 893x and 8000-IF series of Interface cards used in conjunction with CPU-7 cards, this connector is physically separated from the main card in order to allow for replacement of the intelligent portion of the card while maintaining electrical connectivity to the WAN parts.

Specifications

WEIGHT & DIMENSIONS

- 8” x 7.5” (20cm x 18.75cm)
- .75 lbs (.34 kg)

POWER

- 892060: .6 Watts, 2.05 BTU/hr
- 892260: .85 Watts, 2.9 BTU/hr
- 892360: .85 Watts, 2.9 BTU/hr
- 892460: .85 Watts, 2.9 BTU/hr
- 893270: .69 Watts, 2.34 BTU/hr
- 893370: .94 Watts, 3.19 BTU/hr
- 893470: .44 Watts, 1.48 BTU/hr

INTERFACES

- RJ27 50-pin female craft cable
- Up to 5 RJ45 ports
- DB9 female connector (892x series only)

STANDARDS SUPPORT

- Telcordia GR-63 CORE 10/95
- EN 50 081.1 10/12/9
- EN50082-1 10/12/9
- EN 60 950/Al 0
- ITU-T G.797 1993
- ITU-T V.22 bis
- ANSI/EIA RS232C
- ANSI/UL 1459
- EN 55 022
- EN61 000-4-2 Level 4
- EN 61 00-4-4 Level 2
- EN 61 000-4-5 Level 2
- ENV 50 140 Level 2
- EN 61 000-4-4 Level 2
- CSA C22.2

ENVIRONMENTAL

- Operating Temperature: 0 to 50 degrees Celsius
- Storage Temperature: -20 to 80 degrees Celsius
- Humidity: 0 to 95% (non-condensing)

GEEK SPECS

- External Sync Options 892260, 893270: Single or redundant external sync from framed T1 timing source
- Timing source
- Primary and secondary timing source selectable from WAN interface card or Internal clock (Stratum 4)
- Electrical Interface G.703/4 or DSX-1 (with optional CSU) – via WAN card
- Connector Model Type
  - 1 Female 50 pin RJ27X Telco connector
  - Computer Port
  - DB9M DTE or RJ45
  - Electrical Interface RS-232, ITU.T V24/V28
  - Function: Connects to Local Element Management System
  - Code set 8 bit characters plus one start and one stop bit with no parity
  - Max Speed 19.2Kbps
- Control Terminal Interface Port
  - Connector RJ48F, 8 pin. EIA 561
  - Electrical Interface DCE RS232. ITU-T V24/V28
  - Function: Connect Local VTI00 compatible Control Terminal local craft interface
  - Speed: Maximum 9,600 bps asynchronous
  - Code set: 8 bit characters plus one start and one stop bit with no party
- Nodal Port
  - Connector RJ48F, 8-pin
  - Electrical Interface Dry contact
  - Alarm Output Passive current loop, one normally open loop and one normally closed loop
  - Function: Alarm management between co-located IMACS nodes and external alarm management systems end panels.
- Modem Port (Models 892060, 892360, 893360 and 8000-IF+MODEM)
  - Connector Female 6-pin RJ-11C socket
  - Electrical interface 600 ohm 2-wire balanced
  - Protection HV Zener. 0.25A fuses on Tip and Ring
  - Function: Connect internal modem to PSTN (Public Switched Telephone Network) for access to remote operator and remote EMS network management system.
  - Modem Specification
  - Compatibility: ITU-T V.22 his|
  - Modulation: 16 point QAM
  - Line Interface: 2-wire balanced 600 ohm
  - Ringer Equivalence: 0.2 A
  - Approval: FCC Part 68
  - Equalization: Receive automatic adaptive, Transmit fixed compromise
  - Transmit Level: -9.5 dBm
  - Receiver Sensitivity: ON to OFF threshold -45 dBm OFF to ON threshold 48 dBm
  - Dialing Mode: DTMF Tone
  - Speed Supported: 2.400 bps asynchronous
  - Code Set: 8 bit characters plus one start and one stop bit with no parity

Ordering Information

CPU-3	
MODEL	DESCRIPTION
PRM-892060	IMACS,I/F,8P,T1/E1,32K,W/MOD

CPU-5 AND CPU-6	
MODEL	DESCRIPTION
PRM-892260	IMACS,I/F,8P,128K,NO MOD
PRM-892360	IMACS,I/F,8P,128K
PRM-892460	IMACS,I/F,128K,W/O MODEM

CPU-5 AND CPU-6	
MODEL	DESCRIPTION
PRM-892260	IMACS,I/F,8P,128K,NO MOD
PRM-892360	IMACS,I/F,8P,128K
PRM-892460	IMACS,I/F,128K,W/O MODEM

CPU-7 AND 8000	
MODEL	DESCRIPTION
PRM-893270	IMACS, RDNT, I/F, EXT SYNC, 8P, NO MOD
PRM-893370	IMACS, RDNT, I/F, 8P, MODEM
PRM-893470	IMACS, RDNT, I/F, W/O MODEM
8000-IF	IMACS 8000, RDNT, I/F, W/O MODEM
8000-IF+EXT	IMACS 8000, RDNT, I/F, EXT SYNC, 8P, NO MOD
8000-IF+MODEM	IMACS 8000, RDNT, I/F, 8P, MODEM