IMACS Interface Cards

Features

- **Provides physical connections for E1/Tl WAN interfaces.**

- **Range of Interface Cards to support low-end or high-end functionality**

- **Optional integral modem for remote connectivity.**

- **Serial port for local VTl00 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.**

- **External synchronization options.**

The interface cards provide all management and control communications connections to the system and contain the non-volatile RAM in which all configuration information is stored. The interface cards provide all communications, control, and network interfaces to the IMACS system. The use of non-volatile 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.

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.

IMACS Interface Cards

Card Specification								
	Configuration Storage	Models 892060					32K NVRAM	
		Models 892260, 892360 & 892460					128K NVRAM	

	Interfaces	Model	TI/El Links	Computer Port	Control Terminal Interface Port	Modem Port	Internal Modem	External Sync
		892060	8 T1/E1	yes	yes	yes	yes	no
		892260	8 T1/El	yes	yes	no	no	yes
		892360	8 T1/El	yes	yes	yes	yes	no
		892460	8 T1/El	yes	yes	no	no	no

	External Sync Options	892260: Single or redundant external sync from framed T1 timing source

Timing source

Internal clock (Stratum 4)   892x6x: Primary and secondary timing source selectable from WAN interface card or
Electrical Interface   G.703/4 or DSX-1 (with optional CSU) - via WAN card modules

Connector	Model	Type
	892060, 89226x, 892360 & 892460	1 Female 50 pin RJ27X Telco connector

Computer Port
Connector   DB9M DTE
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   (Model 892060 and 892360 only)
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   (Models 892060 and 892360 only)
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

IMACS Interface Cards

Standards	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
Compliance	ITU-T V.22bis, 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
Model Number	Model 892060 - 8 Port T1/El Interface Card with modem Model 892260 - 8 Port T1/El Interface Card with framed T1 external sync module Model 892360 - 8 port T1/El Interface Card with modem. Model 892460 - 8 port T1/El Interface Card without modem. All Interface Cards are supplied with stainless steel faceplates, CE Marked

Physical Card Height 8 inches (20 cm)

Specification Card Width 15/16 inches (2.35cm)
Card Depth 71/2 inches (18.75cm)

	Model 892060	Model 892260	Model 892360	Model 892460
Power Con	0.6 watts	0.85 watts	0.85 watts	0.85 watts
BTU/hr	2.05	2.9	2.9	2.9

Oper. Temp 0 to 50 C, 32 to 122F
Storage Temp -20 to 80C,-4 to176 F
Humidity 0 to 95% Humidity. Non-Condensing

IMACS Platform

IMACS Chassis	891630 IMACS 600, 891830 MACS 800, or 891930 IMACS 900
Control CPU Card	880460 supports 892060 880370 supports 892260, 892360 & 892460.
System Host Code	3.x.y & 6.x.y or later
Interface Card	
Release 3.x.y	892060
Release 6.x.y	892260, 892360 & 892460.
Power Supply Options	All AC/DC power supplies supported