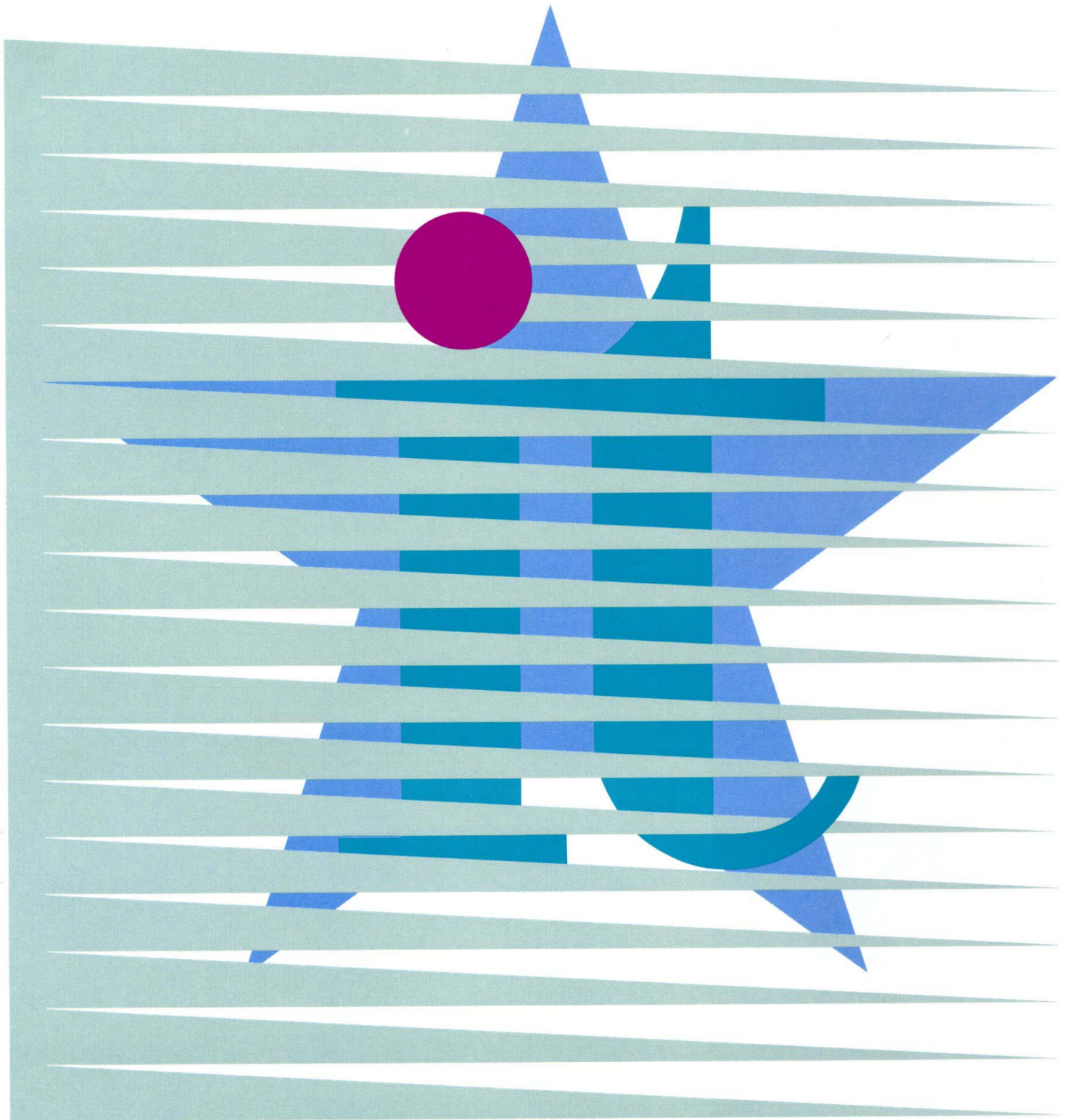
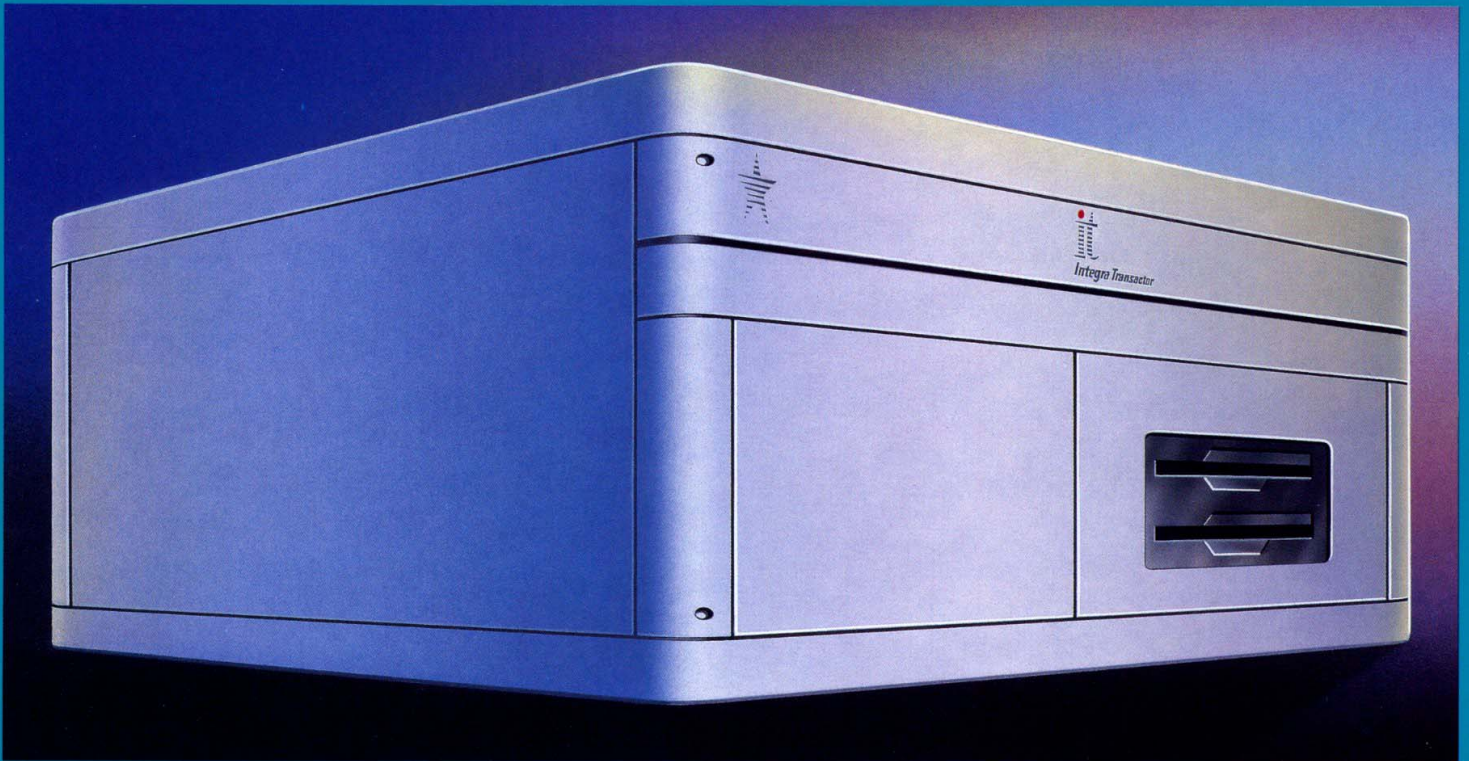


Complete EFT/POS Transaction
Systems Integration Services

Integra Systems Inc.





The Integra TRANSACTOR it

Universally applicable

your choice of terminal vendor(s)

your choice of host vendor(s)

your choice of protocol(s)

your choice of message format(s)

Completely expandable

any number of terminals

any number of hosts

add more at any time

Superior price/performance

**Custom-tailored transaction
communications systems**

Integra Systems designs and installs transaction processing systems precisely to your needs.

Integra will integrate any number of different manufacturers' terminals with various local or remotely-located host mainframes to provide you with a complete Electronic Funds Transfer/Point of Sale (EFT/POS) system. Integra will also design and produce terminals to match your specific requirements, terminals that provide superior performance at competitive prices.

The key is the Integra TRANSACTOR *it*

The key to this flexibility is Integra's universal TRANSACTOR *it*, a high-performance, fully integrated transaction switching facility providing low-cost on-line communications, fast response, and high reliability.

The TRANSACTOR *it* interconnects a wide range of different terminals and mainframe computers on the same network, permitting you to choose the hardware and services that suit you best.

In addition, the TRANSACTOR *it*'s open-ended distributed architecture routes the data from many terminals at different locations and sends it over efficient high-speed trunk lines for processing at another location.

Alternatively, the TRANSACTOR *it* can off-load the routing functions for the terminals, thus removing mundane communications tasks from the mainframe, reducing its load and freeing it for the more complex processing tasks. The choice is yours.

The TRANSACTOR *it* is based on a multiprocessor design incorporating 32-bit microprocessors in a tightly-coupled bus environment. It includes modular software to handle a variety of communications functions and protocols concurrently. Specify your own transaction switching, communications, and processing requirements – the TRANSACTOR *it* takes them in stride.



The TRANSACTOR it does it all

Supports all point-of-sale transactions
on an interactive basis, including:

- credit and debit authorizations
- deposits and withdrawals
- payments and transfers
- inquiries
- check verification and guarantees

Provides complete control of terminals,
circuits, and networks

Supplies complete transaction accounting

Offers information reporting on

- transaction, terminal, host,
line and network for statistical and
performance accounting

Links ATM, POS, POS with data capture
and EFT terminals with draft capture
and debit

Operates as a front end to one or many
larger host processors simultaneously

Acts as a network switch to allow foreign
transactions to flow to the appropriate
centers for authorization

Supports merchant balancing and
reconciliation of daily transactions

Straightforward, logical design

TRANSACTOR *it* hardware architecture
(Figure 1) makes use of a multi-processor
structure incorporating Communication
Controller modules which are inter-
connected via a 40 megabyte/sec
backplane. Each Communication Controller
module supports six communications lines,
each of which in turn handle up to 20
terminals. TRANSACTORS are linked together
to form an organization-wide, host-
independent network.

Each Communications Controller can
handle a mix of asynchronous, synchronous,
and bit-synchronous protocols (Figure 2).
All lines are capable of half- or full-duplex
mode, depending on the line protocol.

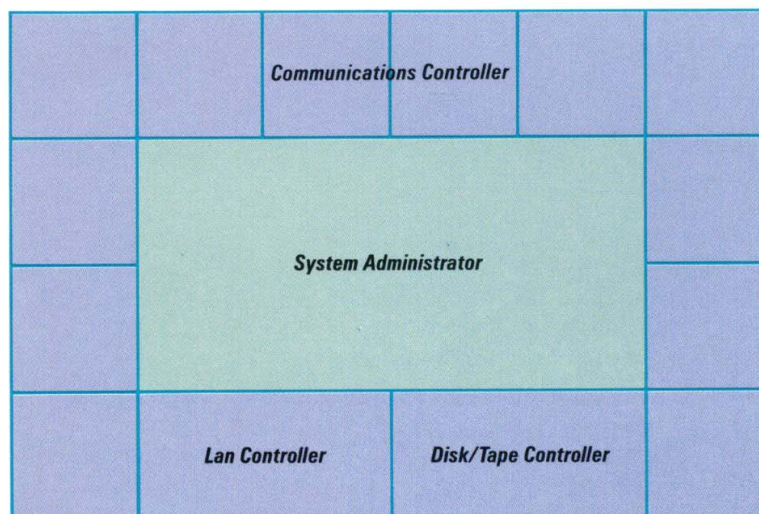


Figure 1
Integra Transactor
Architecture

Coordinating the operations of the TRANSACTOR *it*'s Communications Controllers is a System Administrator (Figure 3) which performs the administrative functions of transaction switching. This includes maintenance of the switched topology, logical terminal and host processor interconnect matrices and other administrative features. The System Administrator also provides the capability to run custom applications software.

Every Communications Controller and System Administrator employs its own Motorola 68000-series processor, which provides the TRANSACTOR *it* with simple plug-in growth capabilities and phenomenal flexibility. The TRANSACTOR *it*'s multi-processor architecture allows it to expand with your needs.

The TRANSACTOR *it* also incorporates an optional LAN Controller, an Ethernet IEEE 802 standard communications interface capable of operating at up to 10 megabits/second. It is used to transmit packets between two or more centrally located TRANSACTORS.

The TRANSACTOR *it* also supports a variety of I/O options, including diskettes, hard disks, tape drives, console displays, and printers.

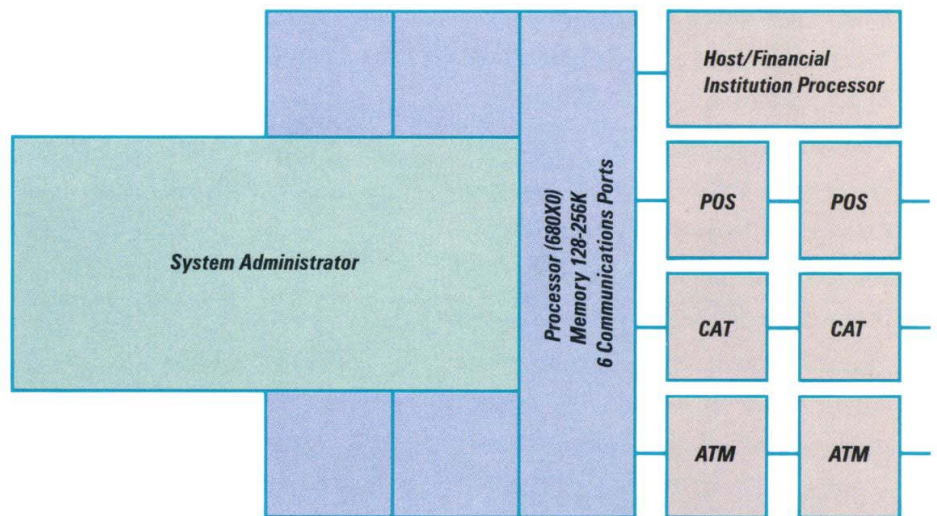


Figure 2
Integra Transactor
Communications Controller

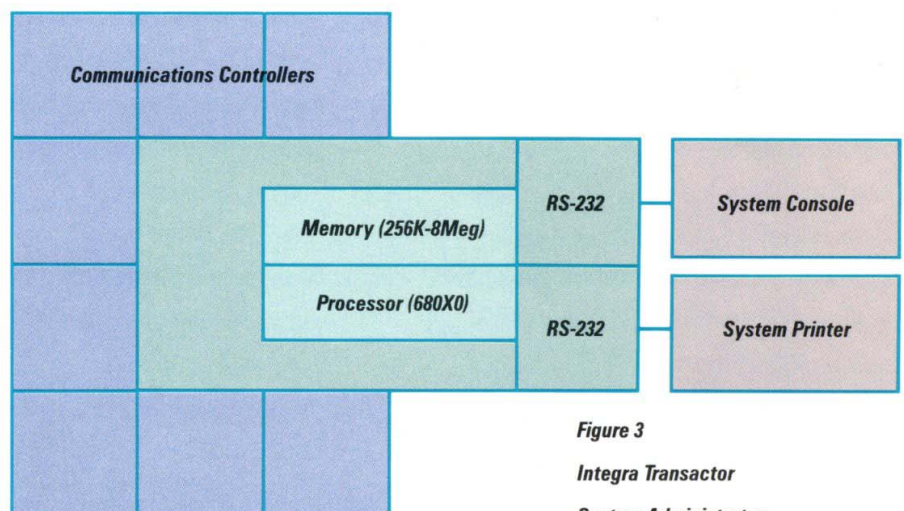


Figure 3
Integra Transactor
System Administrator

Modular software for maximum flexibility

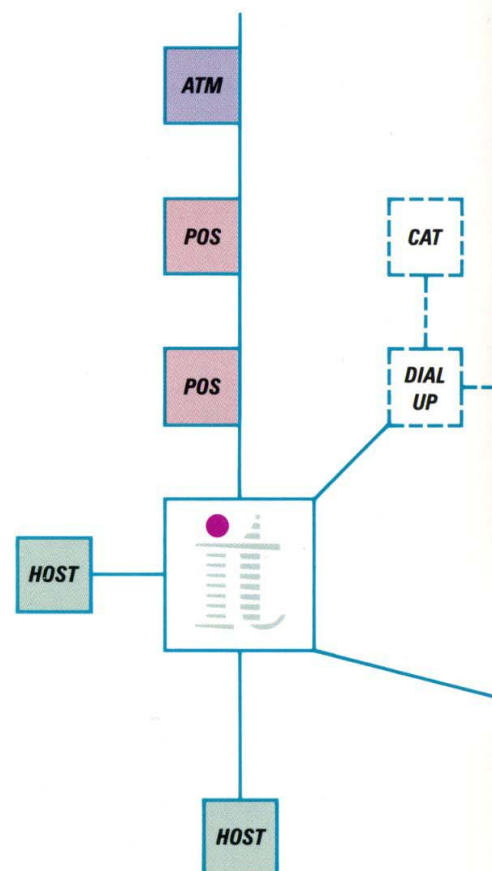
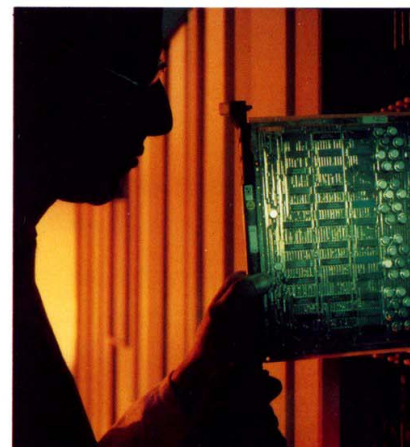
The TRANSACTOR *it*'s completely flexible configuration is accounted for by its modular software. System configuration can be altered dynamically while on-line. Changes can be performed using commands from a host computer or through interaction with standard menus from an operator console. In the event of a power failure, the system recovers to its current configuration with restoration of power.

With its modular approach, the TRANSACTOR *it* can be used effectively in a variety of application areas. Each system installation can be configured to meet the specific needs of the given application. Integra can provide custom applications as required.

The two major software components of the TRANSACTOR *it* are the Communications Controller Segment (CCS) and the System Administrator Segment (SAS). The CCS provides a complete network management function by handling all line disciplines and terminal interfaces. Within the CCS resides a series of processes which allow each communication port to operate independently (supporting its own line disciplines and interfacing to a variety of terminals and computers). Interprocess and intersegment communication, provided through use of dynamic queueing techniques, maximizes concurrent operation. This results in optimum efficiency and independence of each process. The SAS provides the system management functions and performs all transaction-specific processing.

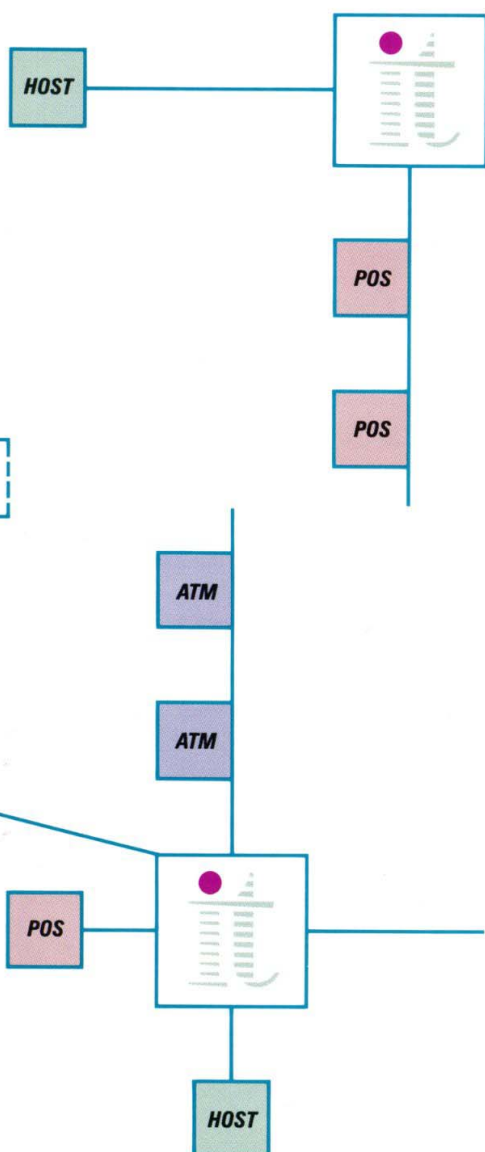
Integra TRANSACTOR *it* Capabilities

- Alternate routing/switching
- Automatic startup/shutdown procedure
- Automatic terminal status/failure detection with alarm
- Complete transaction activity accounting
- Concentration and multiplexing
- Data capture and retrieval
- Error control with automatic retransmission
- Group codes and broadcast commands
- Host or TRANSACTOR *it*-initiated dynamic line reconfiguration
- Individually programmable lines for communications protocol and message format
- Message format conversion
- Optional store-and-forward switching
- Real-time transaction switching
- Speed and protocol conversion
- Stand-in processing
- System/network supervisory control capability
- Terminal-initiated application switching
- Time/date stamping
- Transaction priority
- User-configurable
 - terminal/protocol/message format
- Wide range of modem support including dial-up, leased line and multidrop configurations



Comprehensive support

Integra assures you comprehensive support at every level. We provide hands-on instruction, software installation and on-site testing. We maintain a support response network that gets you back in service within a few short hours of trouble. Integra can invoke everything from remote diagnostics to on-site field engineers to keep your system functioning smoothly and efficiently at all times.



Integra TRANSACTOR it specifications

Terminal Communications Features

Character format:

Async, Bisync, SDLC/HDLC

Character coding:

ASCII, EBCDIC

Data speed:

programmable 300 to 56K bits/sec

Communications protocol:

Burroughs poll/select TC500/700

controller emulation

Datapac ISO poll/select 3201 PAD

emulation

IBM BSC multipoint 3270 host

emulation

NCR poll/select NCR270 Series

controller emulation

Others available on request

Message sizes:

No limit on logical and

physical message size

Dynamically adjusted to suit

requirements

Message formats:

American Express

Diebold TABS

ISO 8583

Mastercard

NCR

VISA I and VISA II

Custom as required

Modem/line characteristics:

Dial up

Leased line

Multidrop

Host Communications Features

Character format:

Async, Bisync, SDLC/HDLC

Character coding:

ASCII, EBCDIC

Data speed:

programmable 300 to 56K bits/sec

Communications protocols:

Burroughs poll/select TC500/700

(master or slave)

NCR poll/select NCR 270 Series

(master or slave)

IBM BSC Multipoint 3270 terminal

emulation

IBM BSC point-to-point 2870/3780

IBM SNA LU2/LU6.2 support

Datapac X.25 3000 service

Others as required

Messages sizes:

No limit on logical and

physical message size

Dynamically adjusted to suit

requirements

Message formats:

American Express

Diebold TABS

Mastercard

NCR

VISA I and VISA II

Custom as required

Modem/line characteristics:

Dial-up

Leased line

Multidrop

Network Control Features

Message routing:

Criteria tables

Topology tables

Priority tables

Negative file service:

Maintenance features

Multiple file capability

Draft capture:

Store and forward

Edit features

Activity file

Security:

File duplication

Encryption support (PIN, ZONE, DES)

Message authentication code

(MAC) support

Network management:

Communication statistics

Configuration management

Terminal configuration tables

Status reporting

Host messaging

Terminal status tables

Remote diagnostics

Our policy of continuous development may cause the information and specifications contained herein to change without notice.

TRANSACTOR is a registered trademark of Integra Systems Inc
it – trademark pending

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