



PERSONAL EARTH STATION

THE PES™ 5000 IS A HIGH-PERFORMANCE, FLEXIBLE VERY SMALL APERTURE TERMINAL (VSAT) THAT SUPPORTS HIGHLY RELIABLE TWO-WAY DATA, VOICE AND MULTIMEDIA AND ONE-WAY VIDEO COMMUNICATIONS. ORGANIZATIONS LOOKING TO ESTABLISH EFFICIENT, RELIABLE AND COST-EFFECTIVE LAN/WAN CONNECTIVITY BETWEEN MULTIPLE, GEOGRAPHICALLY DISPERSED LOCATIONS SHOULD LOOK NO FURTHER THAN THE PES.



Designed modularly, the PES family of VSATs can be seamlessly customized at each remote location providing the most scalable VSAT solution in the industry.

As the most widely used VSAT in the world with over 250,000 in operation, the PES provides:

- Built-in IP router functionality eliminating the need for external routers.
- Concurrent multi-protocol support, capable of simultaneously carrying SDLC, X.25, TCP/IP with IP routing, SLIP, PPP and several other LAN protocols in bridged mode, and voice.
- Broadband IP-access seamlessly coexisting with and complementing HNS' DIRECWAY™ platforms.
- Integrated Voice over IP (VoIP) capability using ITU-T G.729 (8 Kbps) voice compression and ITU-T H.323 recommendations for multimedia communications over the Internet.
- Efficient use of space segment employing the unique TDMA Flexroute™ satellite access technique and efficient LAN/WAN data compression.
- Optimal application response times and throughput using protocol and application prioritization.

- Ease of implementation and rapid deployment.
- Unparalleled reliability with field proven MTBF of over 100,000 hours.

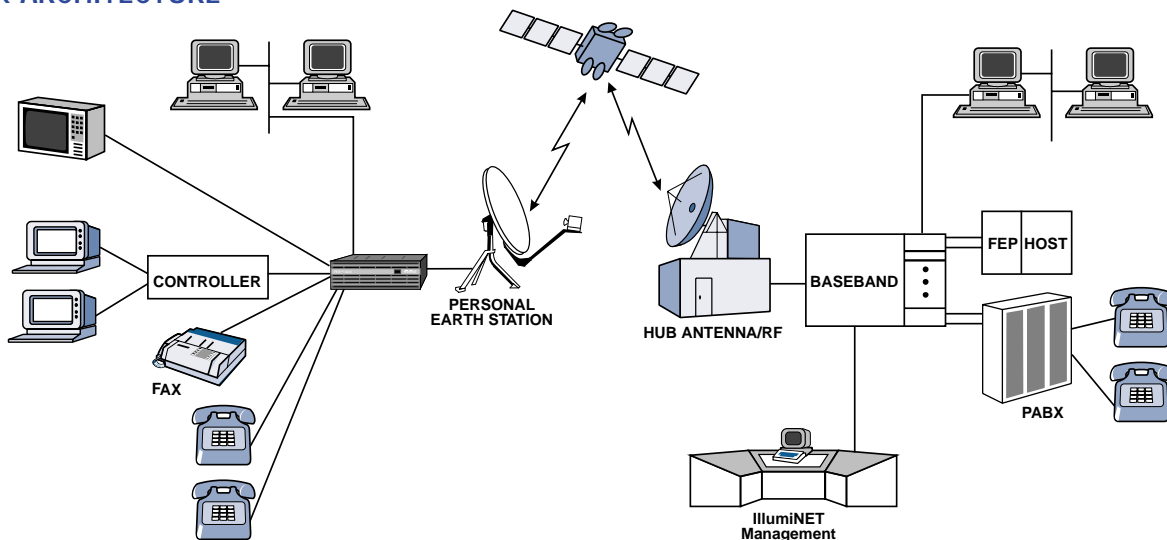
The PES 5000 is optimized to support numerous applications across a wide cross section of vertical industry segments such as Banking and Financial, Retail, Automotive, Retail Petroleum/Convenience Stores, Lottery, Internet Service Providers (ISPs) and more.

APPLICATIONS

- LAN internetworking.
- Point Of Sale (POS) transactions
- Distance Education and Training
- Multimedia (Video, Audio) Delivery
- Voice
- SCADA
- Batch File Transfer
- Inventory Control
- Automatic Teller Machine (ATM)
- Internet/Intranet Access
- Lottery Transactions
- Fax and Image transfer

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NETWORK ARCHITECTURE



TECHNICAL SPECIFICATIONS

FREQUENCY

Ku-band, C-band

DATA RATES

Asynchronous: Up to 19.2 Kbps
Synchronous: 1.2-64 kbps (Standard rates)

PORTS

Standard: Up to 4 serial ports with LAN
Video IF port, 950-1700 MHz
Optional: 2 voice ports

INTERFACES

Data: RS-232, RS-422, or V.35
LAN: Ethernet: 10BaseT Token-Ring: Type 1, Type 3
Voice: RJ-11 two-wire loop start

ANTENNA

Ku-band: 0.98, 1.2, 1.8, and 2.4 meters
C-band: 1.8 and 2.4 meters
RF Power: 0.5, 1.0 and 2 watt (Ku-band) 2 watt (C-band)

OUTROUTE

512, 128 Kbps

INROUTE

256, 128, 64 Kbps

PROTOCOL SUPPORT

Ethernet (10 Mbps)
Token-Ring: 4/16 Mbps (optional)
Transparent Bridging: SDLC (PU4-PU2, PU4-PU4)
SDLC to Token Ring
X.25
BSC 3270
Bit and Byte Transparent
HASP
Frame Transparent
X.3/X.28/X.29 PAD
Broadcast
Telnet
SLIP/PPP
TCP/IP
Specialized Protocols

BIT ERROR RATE

1×10^{-7} – at threshold
 1×10^{-9} – typical

OPERATING TEMPERATURE

Outdoor Equipment -30°C to +55°C
Indoor Equipment +10°C to +40°C

POWER

90-264 VAC, 47-63 Hz
-24 VDC

Customized protocols and configurations may be available. Please contact your local HNS representative for details.