

# ASTER 4

V.34+ 33,600 bit/s on standard switched telephone lines (PSTN) and  
2/4 wire leased lines

•  
Superior Telindus DSP technology for optimum line performance

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Flash memory for future proof solution

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Full Duplex Asynchronous and Synchronous Data Compression

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Advanced PSTN Backup scenarios upon Leased Line Failure

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Hacker-proof PSTN Security Access Control

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Optional DES Encryption

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Multiple Management Facilities



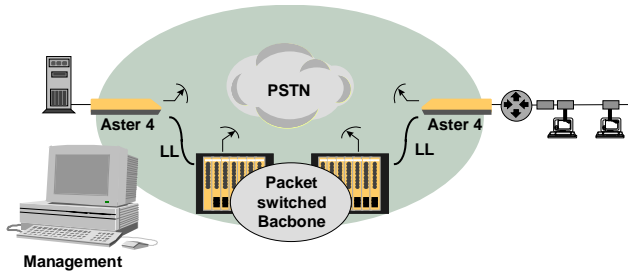
The **Aster 4** series uses the superior Telindus DSP technology to achieve data-transfer rates (uncompressed) of up to 33.6 Kbit/s on leased lines and PSTN dial-up circuits with automatic or user-controlled (e.g. by the network management system) fallback based on custom-defined line-quality thresholds. The modem is designed for both 2-wire and 4-wire analogue lines.

The **Aster 4** can even further increase the user data rate by offering compression with the powerful Lemple Ziv algorithms. Both the V.42bis and the MNP5 algorithm are supported. It provides not only regular asynchronous compression but also synchronous compression on HDLC frames (such as LAPB, LAPF, and SDLC) as a unique standard feature. This gives higher throughput and faster response times when interconnecting Frame Relay, X.25, or SNA equipment.

An optional hardware DES encryption facility ensures data confidentiality, which makes the **Aster 4** ideal for demanding security environments such as those of financial institutions, government agencies, and leading-edge research and development enterprises. The integration of the encryption functionality on the **Aster 4** series enables it to be combined with the compression facility. The result is the best possible combination of performance and security at the lowest price.

The reliability of the network is guaranteed by flexible backup scenarios of the analogue leased line through the PSTN network.





Backbone access with dial backup and integrated network management

To prevent unauthorised access to the network, high-level security features are included to protect the PSTN port. Access security on this high-performance modem includes fully encrypted password exchange, call-back, and dial backup security.

For large concentration sites, rack-mount versions are mounted in a standard 19" card nest and can offer densities of up to 28 modems per nest. Both 48 Vdc and 230/115 Vac powering are available.

## TECHNICAL SPECIFICATIONS\*

### Line Interface

- RJ11 2 wire / 4 wire\* Leased Line
- RJ11 PSTN
- Output level: -15 .. 0 dBm
- Maximum input level: 3 dBm
- Impedance: 600 Ohm, resistive, balanced
- Echo canceller: up to 1.3 sec (2 satellite hops)

### User interface

- LCD screen : 2x16 characters (Desktop versions)
- Keyboard: 12 multifunctional keys (Desktop versions)
- Handhold terminal with LCD and keyboard (Rack-mount versions)

### Auxiliary port\*

- Auxiliary port for management, low speed aux channel or second dial port
- 8-pin RJ45 (Desktop versions)
- 25 pins Sub-D (Rack-mount versions)

### Modulations

- Data Modulations: V.34+, V.34, V.33, V.32bis, V.32, V.29(4W)\*, V.22bis, V.22, V.23, V.21, Bell212A, Bell 103
- Fax Modulations: V.17, V.29, V.27 ter
- Fax compatibility: Fax group 3 -T4 Class 1&2
- PSTN interoperability: V.8, Telindus Auto-Mode
- Error Correction: MNP4, V.42
- Compression: MNP5, V.42bis

### DTE interface

- V.24/V.28 25 pins sub-D connector
- X.21/V.11 interface available on X.21 models (on request)
- Max DTE speed: 115200 bps
- Flow control: CTS, CTS/RTS, Xon/Xoff
- Synchronous operation
- Asynchronous operation according V.14 supporting 8/9/10/11 bits/char.
- RTS/DCD simulated switched carrier operation according to V.13
- Modem Clocking: internal, external, slave/receive
- Automatic speed and parity detection for Hayes AT and V.25bis (7+even/odd, 7+mark/space, 8+none, 8+even/odd)

### Synchronous compression (for HDLC framed protocols)

- NRZ/NRZI encoding
- maximum frame length: 1536 bytes (excluding CRC)

### Automatic dialler

- Dialler protocol: Hayes AT set, V.25bis
- Dial format: Asynchronous, HDLC, Bisync ASCII & EBCDIC, BSC ASCII & EBCDIC
- Memory for 200 telephone numbers and access passwords
- Automatic PSTN dial-backup in case of Leased Line failure

\* Note: Specifications are given on a general basis. Items marked with an asterisk may not be present on all family models

Note: Telindus may make improvements and/or changes in the products described above at any time, without notice and shall in no way be held responsible for errors in this document.

Your Distributor

The **Aster 4** is designed for integration into demanding network environments and is equipped with an embedded secondary maintenance channel for transmitting management information to remote modems without interference to the user data. The **Aster 4** is supported by powerful network management tools:

- HP-OpenView® integrated network management;
- Optional IBM Netview LPDA-2 integrated network management;
- DNMS (Dial-up Network Management System) for dial-in or dial-out pools.

In order to optimise the service on the installed network, Telindus also offers a free Windows® based maintenance package. It is a valuable tool for the field engineer as it supports full configuration and troubleshooting. It can be used for locally controlling the **Aster 4** or for dialling to any modem in the network, providing full control over the remote equipment.

New software releases can easily be downloaded to the **Aster 4**, thanks to its versatile Flash programming facilities. The software can be downloaded locally through the DTE connector or remotely over PSTN network. The Flash download program is available free from the Telindus Internet Web site.

## Features

- Desktop and Rack-mount versions available
- Flash upgradable Firmware and DSP (Digital Signal Processing) software
- Full control over remote modem with local keyboard and LCD.
- Password exchange and Call-back security on PSTN interface
- Analogue line parameter monitoring on LCD
- Free local maintenance software (TRM) available on Telindus Web site
- Free Flash download program (TML) available on Telindus Web site
- Optional hardware DES encryption\*
- Optional LPDA-2 Netview management
- 4 custom defined configurations
- Customised interface signalling GPIN,GPOUT
- V.54 testloops: AL,RDL,DL and integrated 511 BER generator with error count

## Dimensions (HxWxD)

- Desktop versions: 50x202x324 mm
- Rack-mount versions (CN3bis): 268x30x380 mm

## Weight

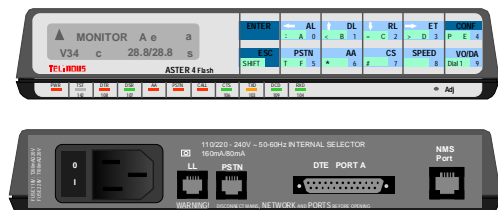
- Desktop versions: 2.3 kg
- Rack-mount versions: 1.0 kg

## Environmental Requirements

- Ambient temperature: 0 to 40 °C
- Storage temperature: -10 to 70 °C
- Maximum altitude: 3000 m
- Relative humidity: 5 to 95 %, non condensing

## Power requirements

- Desktop versions: 100/115Vac or 220/240 Vac 47-63 Hz 12 W
- Simple Rack-mount versions: 7.5 W
- Double (Twin) Rack-mount versions: 9 W



Aster 4 Desktop

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