High Speed V.34 Data Modem

Highlights:
- Reduces connect time and long distance phone charges
- Ideal for central site for point-of-sales applications
- Transmits synchronous data at up to 33.6 Kbps over standard 2-wire telephone circuits
- Achieves effective throughput of up to 128 Kbps for asynchronous applications
- Flash memory

Technically Advanced The DataComm V.F 28.8 / 33.6 is an excellent choice for central office locations requiring high speed, dial-up access to off-premise LANs, particularly in Windows and Graphical User Interface (GUI) environments. The V.F 28.8 / 33.6 modems transmit synchronous and asynchronous data at speeds up to 33.6 Kbps, including dial-up and leased line connectivity with automatic dial backup, as well as dial only modems. With advanced compression techniques, the DataComm V.F 28.8 / 33.6 can achieve an effective throughput of up to 64 Kbps in synchronous and 128 Kbps in asynchronous applications. Using V.34 modulation along with powerful V.42/V.42bis error correction and compression features ensures superior error-free performance.

Effortless Upgrades The DataComm V.F 28.8 / 33.6 incorporates a powerful technological platform that is completely defined by Flash Memory. As your future needs and technological developments dictate, software upgrades to add new features and capabilities may be done in-place.

Superior Performance The DataComm V.F 28.8 / 33.6 provides V.34 and supports slower standard speeds through General DataComm’s powerful Digital Signal Processor (DSP) based platform, including custom VLSI. Using AutoRate Renegotiation, the V.F Series dynamically adjusts operating rates to compensate for switched network line impairments. The V.F Series provides superior performance, even over public network circuits that may vary in quality. This means the public network can be utilized to support high speed applications like remote LAN access, which in the past would have required dedicated links (and therefore may not have been economically feasible).

Flexible Packaging Design The DataComm V.F 28.8 / 33.6 follows GDC’s extremely flexible DataCommonality packaging design. It is available in high density rackmount units — up to 16 can be installed in a 19 inch or 23 inch shelf — or in an attractive, desktop enclosure.

The DataComm V.F 28.8 / 33.6 also supports network monitoring through a full LED array, 4-character Electronic Display Window (EDW), and front-panel pushbutton controls for modem option selection and other menu choices.

All models offer V.35 and EIA/TIA-530A interfaces, eliminating the need for external interface converters in migrating to high speed data applications.

Powerful Diagnostics A comprehensive array of diagnostic tests provides accurate detection of system faults and allows service to be restored quickly. These include ANALOOP® (Analog Loopback/V.54 Loop3), DATALOOP® (Digital Loopback V.54 Loop2), Remote Digital Loopback (V.54 Remote Loop2), and Self-Test. All tests can be initiated with front panel switches and monitored through easy-to-read LED displays. ANALOOP and RDL may also be initiated through the terminal equipment (DTE) interface under the control of communications software.

Security GDC’s Steadfast Security® protects critical financial, governmental, or company-sensitive applications via a password embedded within the handshake sequence and mandatory callback feature.

Setting The Standard The DataComm V.F 28.8 / 33.6 sets the standard for quality design that
meets current and future communications requirements. All V.F Series modems support V.34, V.32 bis, V.32, V.22 bis, V.21, Bell 212A and Bell 103, providing for maximum connectivity and operational flexibility.

Specifications

<table>
<thead>
<tr>
<th>Modulations</th>
<th>Data Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>V.34</td>
<td>33.6 Kbps</td>
</tr>
<tr>
<td>V.32 bis</td>
<td>1.44 Kbps</td>
</tr>
<tr>
<td>V.32</td>
<td>9.6 Kbps</td>
</tr>
<tr>
<td>V.22 bis</td>
<td>2.4 Kbps</td>
</tr>
<tr>
<td>V.22</td>
<td>1.2 Kbps</td>
</tr>
</tbody>
</table>

Carrier Detect Acquisition: Assured with a receive level at or above -43 dBm*. Leased line level: -33 dBm ± 2-wire

Carrier Detect Release: Assured with a receive level at or below -48 dBm*. Leased line level: -38 dBm ± 2-wire

Error Correction: CCITT V.42 and MNP4

Data Compression: CCITT V.42 bis and MNP5 giving a throughput of 128 Kbps asynchronous and 64 Kbps in synchronous mode

Configuration & Control Protocols: Extended "AT" command set, V.25 bis, front panel switches

Security: Online password, dial back – fixed and roving, proprietary SteadFast™ Security with embedded password for synchronous and asynchronous operations, mandatory callback feature

Flow Control: In-band XON/XOFF or external EIA-232 signaling using CTS or RTS/CTS control lines

LED Indicators: Clear to Send, Transmit Data, Receive Data, Off Hook, Power On Indicator, Request to Send, Signal Quality, Test M ode Indicator

Call M onitoring: "AT", V.25 bis

Line Interface: RJ45 Switched Network, RJ11 Phone, RJ45 Private Line

Output Level: Permissive (-9 dBm*) or Adjustable (0 to –15 dBm in Private Line)


RTS/CTS Delay: "AT": 10 to 250 ms, in 10 ms steps; V.13 compliant

Test M ode: V.54-compliant test modes for Analog Loop, Digital Loop, Remote Digital Loop and Self Test

Physical Characteristics

<table>
<thead>
<tr>
<th>Height</th>
<th>Width</th>
<th>Depth</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>267 mm (10.5 in.)</td>
<td>483 mm (19.0 in.)</td>
<td>343 mm (13.5 in.)</td>
<td>18.3 kg (40.25 lbs.)</td>
</tr>
</tbody>
</table>

Shipping Weight: 19.1 kg (42 lbs.)

Operating Temperature: 0° to 50°C (32° to 122°F)

Humidity: Up to 95% (non-condensing)

Interference Protection: Verified to comply with FCC Part 15, Subpart J (Class A requirements) and Part 68

Power Consumption: 7 card-edge watts DC maximum

Safety Protection: UL listed and CSA approved; complies with UL 1459 and 1012*

*Or per country requirement.