

## 3460 Fast'R Sunrise Series Modems



### KEY FEATURES

Based on Raymar-Telenetics' award winning 326XFast V.34 Series of modems, the 3460 Fast'R Series is feature rich. In addition to basic modem features, such as ITU V.34 compliance, Hayes AT and V.25bis command support, the Raymar-Telenetics 3460 Fast'R series offers:

- Synchronous and asynchronous operation
- Fast'RVu configuration, command and test software
- Software Download functionality with FLASH memory
- Extensive security features including callback with password and quiet answer
- Fast'R PLUS standalone with 16-character LCD front panel with pushbuttons
- Fast'R Standalone and stackable units with Speedbars
- Dual 2-wire modem cards for 32 modems per nest or single 4-wire modem cards for 16 modems per nest (AccessWay)
- Preset options for out of the box operation and optional user definable configurations
- Automatic busyout on DTR and DTR activated dialing

### IDEAL FOR CORPORATE ENVIRONMENTS

The Raymar-Telenetics 3460 Fast'R Series of network managed enterprise modems offers the performance and reliability you have come to expect from Raymar-Telenetics, the worldwide leader in high speed analog technology. Fully supporting the V.34 standard, Fast'R modems offer optimum performance over any telephone circuit with line speeds up to 33.6Kbps and actual throughput up to 230.4Kbps.

The 3460 Fast'R Series of networking modems is ideal for corporate environments - from backbone links to SOHO (small/home office). Support for both asynchronous and synchronous operation over dial and two or four wire leased lines means the 3460 Fast'R Series modems can be used anywhere, anytime for a variety of applications. Whether your network needs are connectivity for SNA connectins, link backup, LAN-to-LAN connections, file transfers or remote LAN access, 3460 Fast'R modems have the flexibility to fit. Manufactured to meet Raymar-Telenetics' stringent quality standards, these products offer maximum uptime and reliability.

Raymar-Telenetics' own Fast'RVu configuration software ensures rapid and efficient network deployment. Fast'RVu allows you to configure, monitor and test both local and remote modems over a separate network control channel - that means no interruptions in data transmissions.

The Fast'R Plus standalone offers an LCD front panel for your interactive fingertip control of option selections and modem configuration, while the Fast'R standalone and AccessWay nest cards offer front panel Speedbar LEDs which illuminate to display at-a-glance configured line rate and actual data rates.

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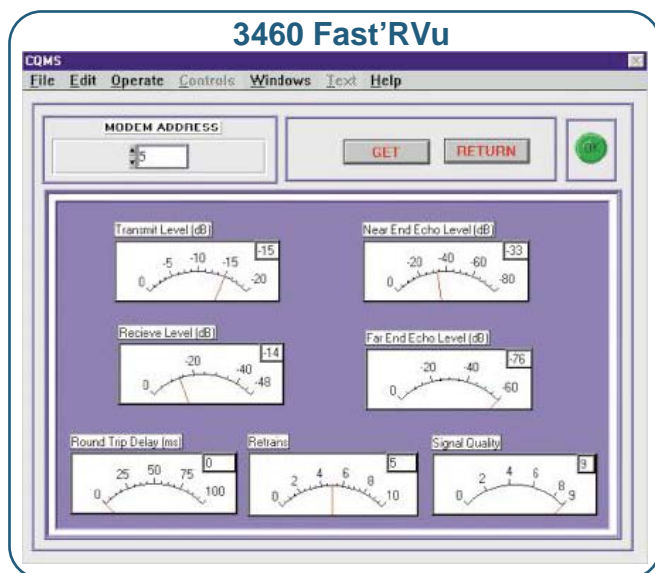
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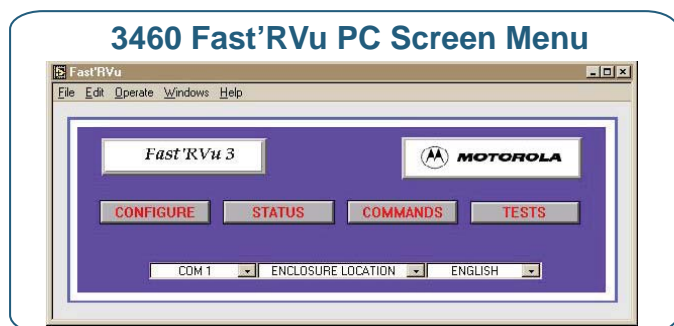
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## PERFORMANCE RELIABILITY MANAGEMENT CAPABILITIES

### FAST'RVu

The 3460's Fast'RVu Windows-based PC application is an industry first. Providing easy configuration and test with pull-down menus, graphic displays for device and line status, and the ability to save and copy configurations from one modem to many or to a PC file...*making network implementation easy*. Plus, use Fast'RVu to upgrade your 3460 modem's software to the latest release. Fast'RVu will automatically download software upgrades to one or multiple modems in release 2.0 or greater. Release 3.0 will also include automatic dial restoral functionality. Fast'RVu operates without disrupting your data by using a management port on each 3460 Fast'R modem or 3460 AccessWay nest.



### FULL NETWORK MANAGEMENT

SNMP Network manageability is a standard feature in the 3460 Fast'R. Each Fast'R modem is secondary channel management ready to provide complete end-to-end non-data disruptive management for alarm and event reporting and tracking. Our advanced management application provides efficient dial pool management allowing you to optimize your network with accurate utilization/availability reporting. Combining the 9000 Open Management System (OMS) with the 3460 Fast'R networking modems gives you control of your network facilitating proactive maintenance for maximum uptime.

### STANDALONE, STACKED OR NESTED

To meet your network requirements and space constraints, the 3460 Fast'R modems are available as standalone units and as single or dual modem cards for installation in the 3460's AccessWay enclosure. 3460 Fast'R PLUS standalone modems offer an LCD display, and 3460 Fast'R standalone modems feature at-a-glance operational status with six LEDs for EIA status and innovative Speedbar LEDs showing line rate and throughput in real time. With the 3460 StackSix stacking kit, standalone modems are easily stackable up to six units high. The StackSix kit includes Fast'RVu PC configuration software and all necessary stacking clips and cables for connecting up to six standalone modems. Eliminate clutter at smaller sites with Raymar-Telenetics' 3460 Fast'R and StackSix kit.

The 3460's AccessWay rack provides space savings for larger network environments and is capable of housing up to 16 dual 2-wire modem cards (32 modems total) or 16 single 4-wire modem cards (16 modems total) in a 7-inch-high nest enclosure. The 3460 AccessWay offers hot swap of nest cards, with optional integral, automatic busy out. This maximizes total network uptime by eliminating the need to power down an entire nest to service each modem pair, while busy out ensures incoming calls are directed to active devices. For those times when a simple power cycle of a card is needed, use Fast'RVu to reset one or more modems. With Fast'RVu and the 3460 AccessWay, you'll never have to power down an entire nest for simple maintenance.

The 3460 AccessWay Nest is available with switch selectable 100V, 115V, 220V, 240V AC or redundant -48V DC power supplies. Active AC components are distributed across each nest card for optimum power supply reliability. Telco line termination options are available via RJ11 connectors or by mass termination, simplifying cabling at central sites.

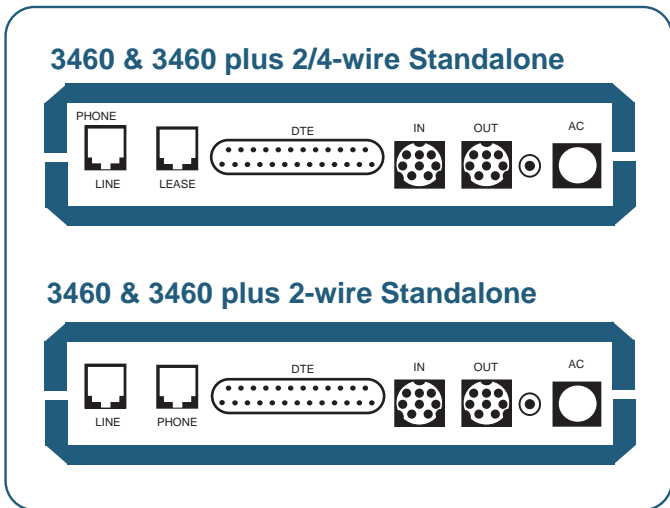
# 3460 Fast'R Sunrise Series Modems

## FEATURES & BENEFITS

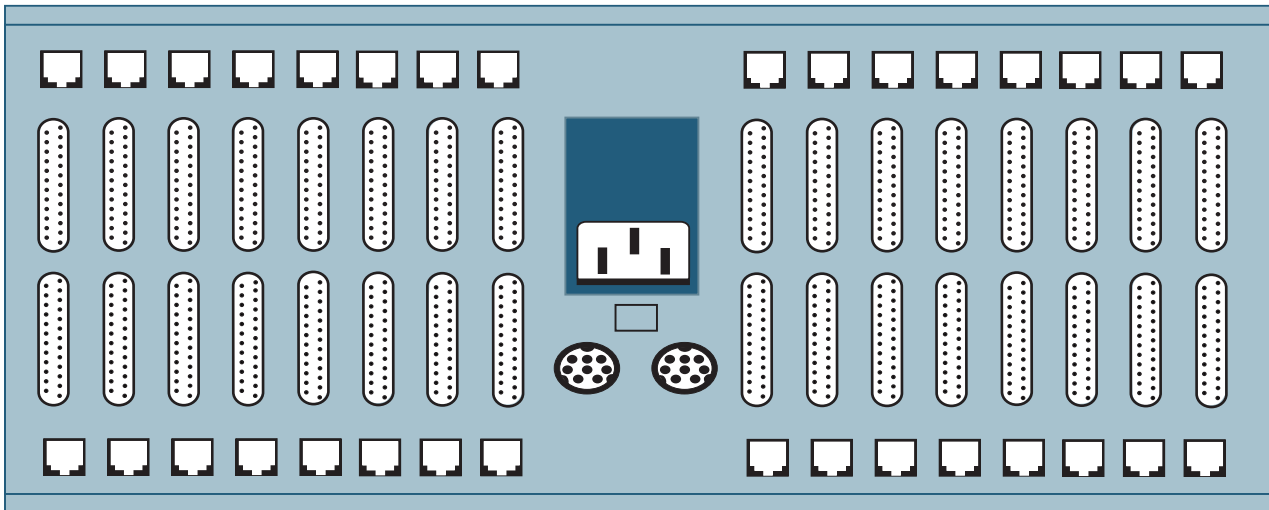
- **Compliance to Industry Standards**  
Ensures interoperability and compatibility.
- **Complies to Relevant Safety & Emissions Standards**  
Available world wide.
- **Flash Memory**  
Provides for easy upgrade of 3460 Fast'R software releases.
- **Fast'RVu Windows Based PC Application Software**  
Facilitates simple and quick installation of central sites in just minutes!

Pull-down, menu driven GUI Interface for configuration, test and real time modem status and line quality of both local and remote modems saves valuable time and costly mistakes - anyone can easily setup and monitor the 3460 Fast'R modems.

- **9000 UX or PC SNMP Management**  
Full management including extensive user programmable alarms on a wide variety of operational and performance parameters. Reports and statistics on faults and utilization, facilitates optimization of dial pool resources to maximize user satisfaction.
- **Fast'R PLUS LCD Front Panel**  
The 16-character display and four pushbuttons let you view and change configuration parameters. It also allows you to initiate tests and view status.
- **Fast'R LED Speedbars**  
At-a-glance status shows modern performance. Provides configured and actual line rate and throughput. The modem daughter card has two LEDs on the rear panel
- **Adaptive Rate System (ARS) Automode, Autobaud**  
Years of modem experience have produced one of the industry's best algorithms for selecting the optimum modulation scheme, the highest DTE rates, and automatically falling forward and back data rates to ensure the highest error free data throughput.
- **Extensive Security Features**  
Control unauthorized access and freezes out hackers.
- **Integral Circuit Quality Monitoring System (CQMS)**  
Real time line statistics for proactive network management.
- **V.54 Diagnostic Test Suite**  
Industry standard tests isolate any degradation in network performance.



## 3460 AccessWay Enclosure



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## TECHNICAL SPECIFICATIONS

Transmission Rates:	33.6, 31.2, 28.8, 26.4, 24.0, 21.6, 19.2, 16.8, 14.4, 12.0, 9.6, 7.2, 3.8, 2.4, 1.2Kbps (+0.01% sync; +/-2.5% asynch) 300 bps in asynch only
Operating Modes:	V.34, V.32bis, V.32, V.23, V.22bis, V.22, V.21, Bell 212, Bell 103
Calling Interfaces:	Hayes AT and ITU-T V.25bis (synchronous only)
Line Types:	2-wire dial line or 2/4-wire leased line
Error Correction & Data Compression:	V.42, LAP-M & MNP 4; V.42bis & MNP 5

### TRANSMITTER SECTION

Output Level Tolerance:	±1.0dB
Output Level:	Country Dependent
Timing:	Selectable internal, external, loopback

### ENVIRONMENT

Operating Temperature:	+32° to 122°F (0° to 50°C)
Storage Temperature:	-40° to 158°F (-40° to +70°C)
Relative Humidity:	0 to 95% non-condensing

### CERTIFICATION COMPLIANCE/APPROVALS

Safety:	UL 1950, CSA 950, IEC 950, EN60950
Telecom:	Country compliance as required, including FCC Part 68 (U.S.), IC-CS-03 (Canada), JATE
EMC Compliance:	Standalone: FCC Part 15, Class B; CISPR 22 and EN 55022, Class B; AS 3548, Class B; EN 50082-1  Nest and Dual Modem Cards: FCC Part 15, Class A; CISPR 22 and EN 55022, Class A; AS 3548, Class A;

## PHYSICAL

### AccessWay for 3460 Fast'R

Size:	7" H x 19" W x 10.5" D (cm: 17.78 H x 48.26 W x 26.7 D)
Power:	100 / 120 / 220 / 240 VAC nominal (switch-selectable)
Frequency:	50 / 60 Hz or -48 VDC nominal (redundant)

### 3460 Fast'R PLUS Standalone

Size:	1.75" H x 6.75" W x 9.6" D (cm: 4.45 H x 17.15 W x 24.38 D)
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### 3460 Fast'R Standalone

Size:	1.75" H x 6.75" W x 9.6" D (cm: 4.45 H x 17.15 W x 24.38 D)
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### 3460 Fast'R Nest Cards

Size:	0.9" H x 6.75" W x 9.6" D (cm: 2.29 H x 17.15 W x 24.38 D)
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## POWER REQUIREMENTS

Standalone:	9V AC, 50 / 60 Hz, 800 mA
Nest:	100 / 120 / 200 / 240 V AC, 1.2 / 1.0 / 0.6 / 0.5 A



## WARRANTY

Raymar-Telenetics manufactured products are warranted against defects in hardware material and workmanship under normal use for one (1) year from date of original retail purchase. Defective product will be repaired or replaced, determination to be made by Raymar-Telenetics, at no charge. Repaired or replaced products are warranted for 90 days or for original warranty period, whichever is longer. Warranty extends to original end-user only.



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0070-1900-001 REV B  
04/02/2009