

# RJ45 Fallback Switch

## AFS-16-1

## Securely Control RJ45 Fallback Switching from *Anywhere!*

### A/B Fallback Switching:

- Ethernet 10/100/1000, T1/E1, RS-232/422/485 Data Line Switching
- Up to 16 Switched Circuit Cards
- Circuits Switched Automatically, Manually, or by Code/Command.
- Accepts SNMP Commands to Control Switching and Select Parameters
- User Defined Default A/B Settings
- Ping-No-Answer Fallback Switching

### Security & Authentication:

- SSHv2 Encryption (FIPS 140-2 Validated)
- HTTPS/SSL Secure Web
- Remote Authentication: LDAP/Kerberos/RADIUS/TACACS+
- Multi-Level Subscriber Directory with Circuit-Specific Password Protection
- IP Address Filtering

### Event Monitoring, Logging and Notification:

- Alarms via SNMP, SYSLOG, Email or Text Message
- Over-Temperature Alarms
- Ping-No-Answer Alarm (Failed Ping Command)
- Invalid Access Lockout and Alarm
- Power Cycle Alarm
- Input Contact Monitor
- Output Contacts to Drive Optional External Devices
- Temperature, Command and Event Logging Capabilities

### Accessibility:

- In-Band (10/100Base-T Ethernet Port)
- Local Access (RJ45 RS232 SetUp Port)
- Reverse/Outbound SSH & Telnet

### Unit Management:

- Command Line Interface (CLI) and Web-Based Graphic User Interface (GUI)
- Includes WTI Device Management Utility
- SNMP Control, Monitoring and Configuration (Supports SNMP Versions 1, 2C and 3)
- Full MIB Support
- NTP for True Server Sync



**Model AFS-16-1**  
 Shown With 16 Circuit Modules Installed

Have you ever had network gear fail or even your entire LAN/WAN go down at the most inconvenient moment possible? It's easy to keep your network up and running with WTI's AFS-16 RJ45 Fallback Switch. The AFS-16 switches RJ45 data lines between primary and secondary ports to keep data signals pumping throughout your network, and can automatically perform redundancy switching in response to ping command failure or input contact signal changes.

### SNMP Control and Alarm Notification

Simple SNMP commands can be used to control AFS-16 switching functions and manage unit configuration, allowing compatibility with most third party enterprise management tools and other SNMP based network management programs. The AFS can also use SNMP traps to provide prompt notification when one of its versatile alarm features detects high temperatures, power interruptions or excessive invalid access attempts.

### Security and Co-Location Features:

Secure Shell (SSHv2) encryption and address-specific IP security masks help prevent unauthorized access to configuration and command functions. The AFS also includes Radius, LDAP and TACACS capability, DHCP and an invalid access lockout feature. An Audit Log records user access, login and logout times and command actions; an Alarm Log records user-defined alarm events.

### WTI Management Utility

The WTI Management Utility allows you to administer multiple WTI units via a single menu. You can control A/B switching at other AFS units, access power control functions on our Switched PDUs and even add, edit and delete user accounts at multiple remote WTI units ... all from a single interface.

# Remote RJ45 Data Fallback Switching



### Environmental Monitoring and Management:

The AFS-16 can constantly monitor temperature levels, ping response and other factors. When user defined thresholds for these values are exceeded, the unit can promptly notify you, via SNMP Trap, Email, Text Message or Syslog Message, allowing rapid response to critical events.

The AFS can also notify you when excessive invalid access attempts are detected, and can automatically lock the network port or serial port to prevent unauthorized users from "hammering" the unit with random passwords in an attempt to gain remote access.

When an external device fails to respond to ping commands, the AFS can automatically switch A/B paths and provide notification. The Input Contact Monitor allows the AFS to watch signal status at an input contact, and then switch circuits or activate optional external devices when significant signal changes are observed.

### Convenient Modular Design

The AFS-16 unit consists of a Card Rack, one Dual Power Supply Module, one Control Card, and up to 16 Switched Circuit Cards. The modular design allows the AFS to grow as your switching needs grow; by simply adding additional Circuit Cards as your application requires them.



**AFS-16PPC  
Control Card**



**AFS-RJ45  
RJ45 A/B Circuit Card**

Switched Circuit Card: Up to 16 Modules	
Interface:	RJ45-3, Three Jacks, 8 Pins Switched Common Jack to A or B Jack.
Contacts:	High Reliability, Mechanical Relays, Break-Before-Make Contacts with 1 Amp @ 30 VDC Rating, 100 Million Cycle Life.
Switching:	Individual Toggle Switch, Plus Gang Switching from Control Module. By Slot Number or by Name.
Manual:	
Code/Browser:	
Card Rack and Control Unit	
Ethernet Port:	RJ45, 10/100Base-T
Serial Console Port:	1 each, RJ45, RS232C
AUX Connector:	5-Pin Quick-Connect Terminal Block for Connection to Alarm Output and Monitor Inputs (Low: 0 to -48V, High: +5 to +48V).
Coding:	Serial ASCII, 8 Bits No Parity
Data Rate:	1200, 2400, 9600, 19.2K bps
Memory:	Nonvolatile Parameter Storage.
Break:	Send Break or Inhibit Break
Username & Passwords:	32 character usernames; 16 char. passwords, Up to 128 pairs.
RS232 Port Interface:	
Connector:	One (1) RJ45 connector (DTE pinout)
Coding:	7/8 bits, Even, Odd, No Parity, 1, 2 Stop Bits
Flow Control:	XON/XOFF, RTS/CTS, Both, or None
Data Rate:	300 to 115.2K bps (all standard rates)
Physical/Environmental:	
Size:	5.25" x 19.00" x 6.75" (H x W x D)
Power:	100/240 VAC 50/60 Hz, 15 watts, Dual Inputs
Weight:	Shipping Weight, Fully Loaded, 15 pounds
Operating Temp.:	32°F to 122°F (0°C to 50°C)
Humidity:	10 - 90% RH
Ordering Information:	
AFS-16-1	Base Unit: AFS-16R (Card Rack,) AFS-16P-Dual (Power Supply) & AFS-16PPC (Control Card)
AFS-16R	AFS Card Rack/Chassis, 19" Rack Mount
AFS-16P-Dual	AFS Dual Input Power Supply Module
AFS-16PPC	AFS Control Module
AFS-RJ45	Individual RJ45 A/B Circuit Card Module
AFS-16BP1	Blank Panel; Covers One Empty Card Slot
AFS-16BP4	Blank Panel; Covers Four Empty Card Slots

# Remote RJ45 Data Fallback Switching