

# INTELLAPATCH®

## Series 2000 Chassis



### Applications

#### Test lab environments

- Controls and automates complex test configurations at multiple data rates and protocols

#### Enterprise networks

- Enables electronic sharing, distribution, and remote management of monitoring equipment

#### Network security

- Control access to any area of any network by allowing network locations to be electronically isolated or disconnected

The APCON INTELLAPATCH® family of physical layer switches enables cost-saving management at Layer 1, the foundation of every enterprise network or interoperability test lab. Wire-once technology, plus easy-to-use software, allow IT and test lab personnel to use the INTELLAPATCH switch to automate and manage their networks with increased efficiency and cost effectiveness.

With a compact design that saves valuable rack space, INTELLAPATCH Series 2000 chassis provide up to 288 ports of any-to-any connectivity, always at full wire-line speed. Series 2000 chassis can be populated with any Series 2000 blade including 1, 2, 4 and 10 Gbps Fibre Channel, Ethernet from 10 Mbps to 10 Gbps, T1/E1/J1, DS3/E3/STS-1, SONET/SDH, FDDI and digital video.

INTELLAPATCH switches enable cross-connection between copper and optical cables, providing easy-to-use point-to-point, multicast, and loop connectivity across the non-blocking, full line-rate switching matrix. All ports are fully bi-directional, offering complete flexibility in determining where to connect host computers, targets, switch ports, or other network devices.



## Features

- Accepts up to 18 blades for a maximum of 288 ports in a single chassis
- Web-enabled interface for remote operation
- Simultaneous access allows concurrent operation by multiple users
- Compliant with major network protocols, including Fibre Channel, Ethernet, SONET/SDH, T1/E1/J1, and DS3/E3/STS-1, from 10 Mbps up to 10 Gbps
- Two Ethernet and up to two serial ports (depending on model) for management and remote operation

## Software

### Two Industry-Specific Configurations

APCON chassis are now available in two configurations – Standard and Enterprise. Each chassis ships pre-loaded with a suite of embedded software optimized for the intended environment.

The **Standard** configuration, which is ideal for lab environments and test automation, includes the APCON **WEBX** web interface and also offers APCON's CLI (Command Line Interface) programming API and SSL/SSH and redundant power supplies as well. APCON also offers Scripting Libraries containing functions used for common applications. These enable users to quickly automate and streamline **INTELLAPATCH** operation.

The **Enterprise** configuration, designed for network monitoring applications, combines the standard **WEBX** interface with embedded **MONITOR** application. TACACS+ and RADIUS directory authentication, and SNMPv3 with gets/sets/traps, are also included for improved network integration and accessibility. For optimal reliability and security, all Enterprise chassis offer SSL/SSH encryption and redundant power supplies as well.

### Multi-Switch Management Software

#### TITAN

TITAN is the ideal software tool for enabling users to cascade multiple **INTELLAPATCH** switches to create an expanded virtual switch matrix. It is compatible with Enterprise, Standard and legacy chassis configurations. TITAN software comes pre-loaded on the TITAN server appliance or is available separate for download.

# INTELLAPATCH®

## Series 2000 – 16 Port Chassis



### Specifications: ACI-2065-C00-D, ACI-2065-E00-D

- Number of blade slots: 1
- Number of ports: up to 16, depending on blade type
- Protocols: blade specific
- Compliant with: 1, 2, 4 and 10 Gbps Fibre Channel, 10, 100, 1000 Mbps, and 10 Gbps Ethernet OC-3/STM-1 SONET/SDH, OC-12/STM-4 SONET/SDH, OC-48/STM-16 SONET/SDH, T1/E1/J1; DS3, T3/STS-1; FDDI, STM-1/4/16, ESCON, and a multi-rate blade capable of supporting HD video and NTSC/PAL
- Blade Data Rate: 10 Mbps to 10 Gbps

### Controller Card

- Includes Controller Card with dual 10/100/1000 management interfaces

### Serial Interface

- Ports: 1 RS-232 Serial
- Rate: 9,600 baud
- Mode: 8 data bits, no parity, 1 stop bit, no flow control
- Maximum Cable Length: 15 meters (49.21 feet)
- Rear Panel Connectors: DB-9 female

### Management Port

- Protocol: TCP/IP
- Interface: 10/100/1000 Base-T Ethernet
- Rear Panel Connector: RJ45
- Two ports for redundant connections

### Weight

- 2.9 kg (6.4 lbs) without blades or transceiver modules
- Power (max): 90-240 VAC Auto-sensing, 50/60 Hz single-phase (100 W)
- Operating Temperature: 0°C to 50°C (32°F to 123°F)
- Storage Temperature: -40° to 85° C
- Humidity: 0% to 90 % RH (non-condensing)

### Dimensions

- 16.75"W x 15.00"D x 1.75"H
- 42.5cm x 38.1cm x 4.4cm
- 1 RU

### Software

- Comes pre-loaded on chassis and includes APCON WEBX software (web browser GUI), Command Line Interface (CLI) and SNMP v1, v2, v3 (SNMP v3 available on Enterprise)
- MONITOR is included with the Enterprise version

### Agency Approvals

- UL, FCC Class A, CE



### Specifications: ACI-2069-C00-D, ACI-2069-E00-D

- Number of blade slots: 2
- Number of ports: up to 32, depending on blade type
- Protocols: blade specific
- Compliant with: 1, 2, 4 and 10 Gbps Fibre Channel, 10, 100, 1000 Mbps, and 10 Gbps Ethernet OC-3/STM-1 SONET/SDH, OC-12/STM-4 SONET/SDH, OC-48/STM-16 SONET/SDH, T1/E1/J1; DS3, T3/STS-1; FDDI, STM-1/4/16, ESCON, and a multi-rate blade capable of supporting HD video and NTSC/PAL
- Blade Data Rate: 10 Mbps to 10 Gbps

### Controller Card

- Includes Controller Card with dual 10/100/1000 management interfaces

### Serial Interface

- Ports: 1 RS-232 Serial
- Rate: 9,600 baud
- Mode: 8 data bits, no parity, 1 stop bit, no flow control
- Maximum Cable Length: 15 meters (49.21 feet)
- Rear Panel Connectors: DB-9 female

### Management Port

- Protocol: TCP/IP
- Interface: 10/100/1000 Base-T Ethernet
- Dual RS-232 Serial Ports, DB-9 connector
- Rear Panel Connector: RJ45
- Two ports for redundant connections

### Weight

- 4.1 kg (9.0 lbs) without blades or transceiver modules
- Power (max): 90-240 VAC Auto-sensing, 50/60 Hz single-phase (100 W)
- Operating Temperature: 0°C to 50°C (32°F to 123°F)
- Storage Temperature: -40° to 85° C
- Humidity: 0% to 90 % RH (non-condensing)

### Dimensions

- 16.75"W x 15.00"D x 2.1"H
- 42.5cm x 38.1cm x 5.3cm
- 2 RU

### Software

- Comes pre-loaded on chassis and includes APCON WEBX software (web browser GUI), Command Line Interface (CLI) and SNMP v1, v2, v3 (SNMP v3 available on Enterprise)
- MONITOR is included with the Enterprise version

### Agency Approvals

- UL, FCC Class A, CE

# INTELLAPATCH®

## Series 2000 — 64 Port Chassis



### Specifications: ACI-2061-C00, ACI-2061-E00

- Number of blade slots: 4
- Number of ports: up to 64, depending on blade type
- Protocols: blade specific
- Compliant with: 1, 2, 4 and 10 Gbps Fibre Channel, 10, 100, 1000 Mbps, and 10 Gbps Ethernet OC-3/STM-1 SONET/SDH, OC-12/STM-4 SONET/SDH, OC-48/STM-16 SONET/SDH, T1/E1/J1; DS3, T3/STS-1; FDDI, STM-1/4/16, ESCON, and a multi-rate blade capable of supporting HD video and NTSC/PAL
- Blade Data Rate: 10 Mbps to 10 Gbps

### Controller Card

- Includes Controller Card with dual 10/100/1000 management interfaces

### Serial Interface

- Ports: 1 RS-232 Serial
- Rate: 9,600 baud
- Mode: 8 data bits, no parity, 1 stop bit, no flow control
- Maximum Cable Length: 15 meters (49.21 feet)
- Rear Panel Connectors: DB-9 female

### Management Port

- Protocol: TCP/IP
- Interface: 10/100/1000 Base-T Ethernet
- Rear Panel Connector: RJ45
- Two ports for redundant connections

### Weight

- 6.09 kg (13.4 lbs) without blades or transceiver modules
- Power (max): 90-240 VAC Auto-sensing, 50/60 Hz single-phase (300 W)
- Operating Temperature: 0°C to 50°C (32°F to 123°F)
- Storage Temperature: -40° to 85° C
- Humidity: 0% to 90 % RH (non-condensing)

### Dimensions

- 16.75"W x 15.00"D x 4.85"H
- 42.5cm x 38.1cm x 12.32cm
- 3 RU

### Software

- Comes pre-loaded on chassis and includes APCON WEBX software (web browser GUI), Command Line Interface (CLI) and SNMP v1, v2, v3 (SNMP v3 available on Enterprise)
- MONITOR is included with the Enterprise version

### Agency Approvals

- UL, FCC Class A, CE



### Specifications: ACI-2064-C00, ACI-2064-C01

- Number of blade slots: 9
- Number of ports: up to 144, depending on blade type
- Protocols: blade specific
- Compliant with: 1, 2, 4 and 10 Gbps Fibre Channel, 10, 100, 1000 Mbps, and 10 Gbps Ethernet OC-3/STM-1 SONET/SDH, OC-12/STM-4 SONET/SDH, OC-48/STM-16 SONET/SDH, T1/E1/J1; DS3, T3/STS-1; FDDI, STM-1/4/16, ESCON, and a multi-rate blade capable of supporting HD video and NTSC/PAL
- Blade Data Rate: 10 Mbps to 10 Gbps

### Controller Card

- Includes Controller Card with dual 10/100/1000 management interfaces

### Serial Interface

- Ports: 2 RS-232 Serial
- Rate: 9,600 baud
- Mode: 8 data bits, no parity, 1 stop bit, no flow control
- Maximum Cable Length: 15 meters (49.21 feet)
- Rear Panel Connectors: DB-9 female

### Management Port

- Protocol: TCP/IP
- Interface: 10/100/1000 Base-T Ethernet
- Rear Panel Connector: 2 RJ45
- Two ports for redundant connections

### Weight

- 10.09 kg (22.2 lbs) without blades or transceiver modules
- Power (max): 90-240 VAC Auto-sensing, 50/60 Hz single-phase (600 W) or 48 VDC
- Operating Temperature: 0°C to 50°C (32°F to 123°F)
- Storage Temperature: -40° to 85° C
- Humidity: 0% to 90 % RH (non-condensing)

### Dimensions

- 16.75"W x 15.00"D x 9.85"H
- 42.5cm x 38.1cm x 25.02cm
- 6 RU

### Software

- Comes pre-loaded on chassis and includes APCON WebX software (web browser GUI), Command Line Interface (CLI) and SNMP v1, v2, v3 (SNMP v3 available on Enterprise)
- MONITOR is included with the Enterprise version

### Agency Approvals

- UL, FCC Class A, CE

# INTELLAPATCH®

## Series 2000 – 288 Port Chassis



### Specifications: ACI-2058-C00, ACI-2058-C01, ACI-2058-E01

- Number of blade slots: 18
- Number of ports: up to 288, depending on blade type
- Protocols: blade specific
- Compliant with: 1, 2, 4 and 10 Gbps Fibre Channel, 10, 100, 1000 Mbps, and 10 Gbps Ethernet OC-3/STM-1 SONET/SDH, OC-12/STM-4 SONET/SDH, OC-48/STM-16 SONET/SDH, T1/E1/J1; DS3, T3/STS-1; FDDI, STM-1/4/16, ESCON, and a multi-rate blade capable of supporting HD video and NTSC/PAL
- Blade Data Rate: 10 Mbps to 10 Gbps

### Controller Card

- Includes Controller Card with dual 10/100/1000 management interfaces

### Serial Interface

- Ports: 2 RS-232 Serial
- Rate: 9,600 baud
- Mode: 8 data bits, no parity, 1 stop bit, no flow control
- Maximum Cable Length: 15 meters (49.21 feet)
- Rear Panel Connectors: DB-9 female

### Management Port

- Protocol: TCP/IP
- Interface: 10/100/1000 Base-T Ethernet
- Rear Panel Connector: 2 RJ45
- Two ports for redundant management connections

### Weight

- 15.45 kg (34 lbs) without blades or transceiver modules
- Power (max): 90-240 VAC Auto-sensing, 50/60 Hz single-phase (1100 W) or 48 VDC
- Operating Temperature: 0°C to 50°C (32°F to 123°F)
- Storage Temperature: -40° to 85° C
- Humidity: 0% to 90 % RH (non-condensing)

### Dimensions

- 16.75"W x 15.00"D x 18.80"H
- 42.5cm x 38.1cm x 47.75cm
- 11 RU

### Software

- Comes pre-loaded on chassis and includes APCON WEBX software (web browser GUI), Command Line Interface (CLI) and SNMP v1, v2, v3 (SNMP v3 available on Enterprise)
- MONITOR is included with the Enterprise version

### Agency Approvals

- UL, FCC Class A, CE

# INTELLAPATCH®

## Series 2000 Chassis Ordering Information

<b>Model</b>	<b>Description</b>
ACI-2065-C00-D	High-density, 1 blade Standard INTELLAPATCH 16 (AC Power)
ACI-2065-E00-D	High-density, 1 blade Enterprise INTELLAPATCH 16 (AC Power)
ACI-2069-C00-D	High-density, 2 blade Standard INTELLAPATCH 32 (AC Power)
ACI-2069-E00-D	High-density, 2 blade Enterprise INTELLAPATCH 32 (AC Power)
ACI-2061-C00	High-density, 4 blade Standard INTELLAPATCH 64 (AC Power)
ACI-2061-E00	High-density, 4 blade Enterprise INTELLAPATCH 64 (AC Power)
ACI-2064-C00	High-density, 9 blade Standard INTELLAPATCH 144 (AC Power)
ACI-2064-C01	High-density, 9 blade Standard INTELLAPATCH 144 (DC Power)
ACI-2064-E00	High-density, 9 blade Enterprise INTELLAPATCH 144 (AC Power)
ACI-2058-C00	High-density, 18 blade Standard INTELLAPATCH 288 (AC Power)
ACI-2058-C01	High-density, 18 blade Standard INTELLAPATCH 288 (DC Power)
ACI-2058-E00	High-density, 18 blade Enterprise INTELLAPATCH 288 (AC Power)

### APCON Professional Services Department

APCON Professional Services provides installation, training, support and design services to customers, with the goal of making it easy for any organization to quickly and successfully deploy and integrate APCON's switches and software.

Professional Services is equipped to address the needs of both enterprise production networks and test lab environments. The full suite of services including installation, training, support and system design is offered, either as part of a standardized package or as a custom-tailored program. For test labs, the business unit is also available to assist with special requests, such as automation script development.

#### Professional Services Offerings:

- Training Development & Education
- Installation & Integration
- Solutions Engineering
- Automation & Scripting Libraries
- Technical Support

Contact APCON for a Professional Services Quote at: 503-682-4050 or 800-624-6808 or learn more at <http://www.apcon.com/products/professional-services.php>