

## FlexSwitch™ 8U Model 6500-FK Replacement Kit

### User Manual



#### PRODUCT OVERVIEW

The 6500-FK is the direct replacement for the discontinued FlexSwitch Model 600XC 8U. The 6500-FK replacement kit consists of two iConverter 4Tx Switch Modules installed in a iConverter 2-Module chassis.

The 6500-FK provides eight auto-negotiating 10/100 RJ-45 ports with auto-crossover that enables easy attachment to hubs, switches and workstations.









The 6500-FK provides on-board DIP-Switches for manual configuration of Port 1 and 2 on each 4-Port Switch Module.

#### INSTALLATION PROCEDURE

- 1) Configure DIP-Switches
- 2) Install Module in Chassis and Connect Cables
- 3) Installing the Chassis
- 4) Apply AC Power
- 5) Verify Operation

##### 1) Configure DIP-Switches

The description of DIP-switch is shown below.

Left		Right
BP A EN		BP A DIS
BP B EN		BP B DIS
MAN		AN
10		100
HD		FD
MAN		AN
10		100
HD		FD

*4 Port Switch Module Default DIP-Switch Settings*

Each 4-Port Switch Module has been pre-configured for Auto-Negotiation with Backplane A and B Enabled.

##### Backplane Port A Enable/Disable

This DIP-Switch must be in the LEFT "Enable" position for the module to operate correctly. The switch provides backplane connectivity with the other switch module.

##### Backplane Port B Enable/Disable

This DIP-Switch must be in the LEFT "Enable" position for the module to operate correctly. The switch provides backplane connectivity with the other switch module.

##### Port 1 and Port 2 RJ-45 Auto-Negotiate/Manual

When this DIP-Switch is in the RIGHT "AN" position, the Port automatically determines the speed and duplex mode of the connecting copper device. If the connecting device cannot provide the proper signal to indicate its own mode of operation, this DIP-Switch should be set to the LEFT "Man" position. Manual mode requires manually configuring the RJ-45 port to match the speed and the duplex mode of the connecting device using the Speed and Duplex DIP-Switches.

When a port is configured for Auto-Negotiation, the automatic crossover detection is enabled for that particular port. Automatic crossover detection is disabled when the port is configured for manual negotiation.

##### Port 1 and Port 2 Speed 10/100Mbps

When the port is configured for Manual Mode (SW3/SW6 in the LEFT position), the Speed DIP-Switch determines the speed of operation for the designated port. Setting the Speed DIP-Switch to the RIGHT "100" position forces the port to operate at 100Mbps. Setting this DIP-Switch to LEFT "10" position forces the port to operate at 10Mbps. Adjust the Speed DIP-Switch to match the speed of the connecting device.

##### Port 1 and Port 2 Duplex Full/Half-Duplex

When the port is configured for Manual Mode (SW3/SW6 in the LEFT position), the Duplex DIP-Switch determines the duplex operation mode for the port. Setting the Duplex DIP-Switch to the RIGHT "FD" position forces the port to operate in Full-Duplex. Setting this DIP-Switch to the LEFT "HD" position forces the port to operate in Half-Duplex. Adjust the Duplex DIP-Switch to match duplex mode the connecting UTP device.

When a port is configured for Auto-Negotiation, the Duplex DIP-Switch will determine if the port advertises Full-Duplex or Half-Duplex. When the Duplex DIP-Switch is in the "FD" position, the port advertises Full-Duplex and Half-Duplex capability. When in the Duplex DIP-Switch is in the "HDX" position, the port advertises only in Half-Duplex capability.

2) Install Module in the Chassis and Connect the Cables

The modules are pre-installed in the 2-Module chassis with the backplane enabled on both modules.

- a. Carefully slide the module into an open slot in the chassis. Align the module with the installation guides and ensure that the module is firmly seated against the backplane. Secure the module by fastening the front panel thumbscrew (push in and turn clockwise to tighten) to the chassis front. Verify the “Pwr” LED is ON (indicating the chassis is powered).



- b. Connect the RJ-45 port via a Category 5 or better cable to a 10BASE-T or 100BASE-TX Ethernet device (depending on the configuration of the port).

3) Installing the Chassis

Wall and Rack Mounting

The 2-Module chassis can be wall/rack mounted by attaching the optional wall/rack mount brackets (8249-0). A 19” Rack Mount Shelf (8260-0) is available to install two 2-Module chassis.

The operating temperature of this equipment is 0 to 50 degrees C. If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack must not exceed the maximum rated temperature for the chassis used.

Installation of the equipment should be such that the air flow in the front and back of the unit is not compromised or restricted.

Installing this equipment into a rack in such a way as to make it unstable **may cause injury or death**. Always make sure that the rack you are installing this equipment into is properly secured, stable, balanced and designed to carry the weight and weight distribution of this equipment.

Never use this equipment to carry any weight except its own. Never use it as a shelf to support the weight of other equipment.

4) Apply AC Power

Power source should be available within 5 ft. of the chassis and installed per the National Electrical Code, ANSI/NFPA-70.

This equipment requires a 100-240VAC, 0.5Amp, 50/60Hz power outlet. Appropriate overloading protection should be provided on the AC power source outlets utilized.

Appropriate overloading protection should be provided on all AC power source outlets utilized.

Attach the AC power cord to the back of the chassis. Connect the AC power cords to the AC outlets and switch the outlets ON.

Any installed iConverter modules will illuminate the power LED.

**WARNING!!!**

**NEVER ATTEMPT TO OPEN THE CHASSIS OR SERVICE THE POWER SUPPLY OR FAN MODULE. OPENING THE CHASSIS MAY CAUSE SERIOUS INJURY OR DEATH. THERE ARE NO USER REPLACEABLE OR SERVICEABLE PARTS IN THIS UNIT.**



Rear of 2-Module Chassis with Power Cord

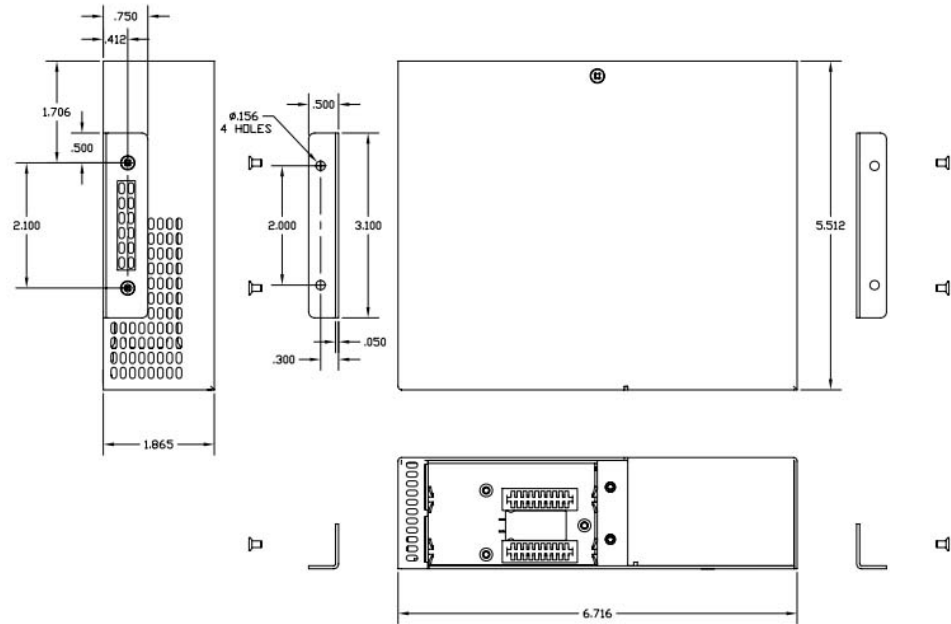
5) LED Indicators

Each 4-Port Switch Module has LED indicators to provide connection information.

LED Function “Legend”	Color	OFF	ON
Power “Pwr”	Yellow	No power	Module has power
Port x “100 Link”	Green	Not linked at 100Mbps	ON: Linked at 100Mbps Blinking: Data activity
Port x “10 Link”	Green	Not linked at 10Mbps	ON: Linked at 10Mbps Blinking: Data activity
x = Port number (1 - 4)			

4 Port Switch Module LED Indicators

## Mechanical



## Specifications

<b>Description</b>	8 Port 10/100 Ethernet Switch
<b>Standards</b>	IEEE 802.3
<b>Regulatory Compliances</b>	Safety: UL, CE, NEBS Level 3, UKCA EMI: FCC Class A ACT: TAA, BAA, NDAA
<b>Environmental</b>	RoHS, WEEE, REACH
<b>Frame Size</b>	1,536 bytes
<b>Port Type</b>	10/100BASE-T (RJ-45)
<b>Cable Type</b>	EIA/TIA 568A/B Cat 5 or higher
<b>AC Power Requirements</b>	100 to 240VAC, 50/60Hz 0.5A @ 120VAC
<b>Dimensions W x D x H</b>	6.7" x 5.51" x 1.87" (435.6 mm x 228.6 mm x 44.5 mm)
<b>Weight</b>	3.0 lbs. (1.36 kg)
<b>Temperature</b>	Commercial: 0 to 50°C Storage: -40 to 80°C
<b>Humidity</b>	5% to 95% non-condensing
<b>Altitude</b>	-100m to 4,000m
<b>Warranty</b>	Lifetime warranty with 24/7/365 free Technical Support

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For warranty service, the product must be sent to an Omnitron designated facility, at Buyer's expense. Omnitron will pay the shipping charge to return the product to Buyer's designated US address using Omnitron's standard shipping method.

## Limitation of Warranty

The foregoing warranty shall not apply to product malfunctions resulting from improper or inadequate use and/or maintenance of the equipment by Buyer, Buyer-supplied equipment, Buyer-supplied interfacing, unauthorized modifications or tampering with equipment (including removal of equipment cover by personnel not specifically authorized and certified by Omnitron), or misuse, or operating outside the environmental specification of the product (including but not limited to voltage, ambient temperature, radiation, unusual dust, etc.), or improper site preparation or maintenance.

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## Environmental Notices

The equipment covered by this manual must be disposed of or recycled in accordance with the Waste Electrical and Electronic Equipment Directive (WEEE Directive) of the European Community directive 2012/19/EU on waste electrical and electronic equipment (WEEE) which, together with the RoHS Directive 2015/863/EU, for electrical and electronic equipment sold in the EU after July 2019. Such disposal must follow national legislation for IT and Telecommunication equipment in accordance with the WEEE directive: (a) Do not dispose waste equipment with unsorted municipal and household waste. (b) Collect equipment waste separately. (c) Return equipment using collection method agreed with Omnitron.

The equipment is marked with the WEEE symbol shown to indicate that it must be collected separately from other types of waste. In case of small items the symbol may be printed only on the packaging or in the user manual. If you have questions regarding the correct disposal of equipment go to [www.omnitron-systems.com/support](http://www.omnitron-systems.com/support) or e-mail to Omnitron at [intlinfo@omnitron-systems.com](mailto:intlinfo@omnitron-systems.com).



## Safety Warnings and Cautions



ATTENTION: Observe precautions for handling electrostatic discharge sensitive devices.



WARNING: Potential damage to equipment and personal injury.



WARNING: Risk of electrical shock.

## CUSTOMER SUPPORT INFORMATION

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