

## USER MANUAL

### Stand Alone FOM Card Chassis SAC-1-AC

# Warning for Your Protection

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1. Read these instructions.
  2. Keep these instructions.
  3. Heed all warnings.
  4. Follow all instructions.
  5. Do not use this apparatus near water.
  6. Clean only with a dry cloth.
  7. Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
  8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
  9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
  10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
  11. Only use attachments/accessories specified by the manufacturer.
  12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
  13. Unplug this apparatus during lightning storms or when unused for long periods of time.
  14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- The apparatus shall not be exposed to dripping or splashing. No objects filled with liquids, such as vases, shall be placed on the apparatus.
- "WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture."

## General Installation Instructions

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Please consider these general instructions in addition to any product-specific instructions in the "Installation" chapter of this manual.

### Unpacking

Check the equipment for any transport damage. If the unit is mechanically damaged, if liquids have been spilled or if objects have fallen into the unit, it must not be connected to the AC power outlet, or it must be immediately disconnected by unplugging the power cable. Repair must only be performed by trained personnel in accordance with the applicable regulations.

### Installation Site

Install the unit in a place where the following conditions are met:

- The temperature and the relative humidity of the operating environment must be within the specified limits during operation of the unit. Values specified are applicable to the air inlets of the unit.
- Condensation may not be present during operation. If the unit is installed in a location subject to large variations of ambient temperature (e.g. in an OB-van), appropriate precautions must be taken.
- Unobstructed air flow is essential for proper operation. Ventilation openings of the unit are a functional part of the design and must not be obstructed in any way during operation (e.g. - by objects placed upon them, placement of the unit on a soft surface, or improper installation of the unit within a rack or piece of furniture).
- The unit must not be unduly exposed to external heat sources (direct sunlight, spot lights).

### Ambient Temperature

Units and systems by FiberPlex are generally designed for an ambient temperature range (i.e. temperature of the incoming air) of +5...+40 °C. When rack mounting the units, the following facts must be considered:

- The permissible ambient temperature range for operation of the semiconductor components is 0 °C to +70 °C (commercial temperature range for operation).
- The air flow through the installation must allow exhaust air to remain cooler than 70 °C at all times.
- Average temperature increase of the cooling air shall be about 20 °C, allowing for an additional maximum 10 °C increase at the hottest components.

If the cooling function of the installation must be monitored (e.g. for fan failure or illumination with spot lamps), the exhaust air temperature must be measured directly above the modules at several places within the enclosure.

### Grounding and Power Supply

Grounding of units with mains supply (class I equipment) is performed via the protective earth (PE) conductor integrated in three pin Phoenix™ connector. Units with battery operation (< 60 V, class III equipment) must be earthed separately. Grounding the unit is one of the measures for protection against electrical shock hazard (dangerous body currents). Hazardous voltage may not only be caused by defective power supply insulation, but may also be introduced by the connected audio or control cables.

This equipment may require the use of a different line cord, attachment plug, or both, depending on the available power source at installation. If the attachment plug needs to be changed, refer servicing to qualified personnel.

## Warranty, Service and Terms and Conditions of Sale

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For information about Warranty or Service information, please see our published 'Terms and Conditions of Sale'. This document is available on [fiberplex.com](https://fiberplex.com), or can be obtained by requesting it from [clients@fiberplex.com](mailto:clients@fiberplex.com) or calling 301.604.0100.

## Disposal

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### Disposal of Packing Materials

The packing materials have been selected with environmental and disposal issues in mind. All packing material can be recycled. Recycling packing saves raw materials and reduces the volume of waste. If you need to dispose of the transport packing materials, recycling is encouraged.

### Disposal of Used Equipment

Used equipment contains valuable raw materials as well as substances that must be disposed of professionally. Please dispose of used equipment via an authorized specialist dealer or via the public waste disposal system, ensuring any material that can be recycled has been. Please take care that your used equipment cannot be abused. After having disconnected your used equipment from the mains supply, make sure that the mains connector and the mains cable are made useless.

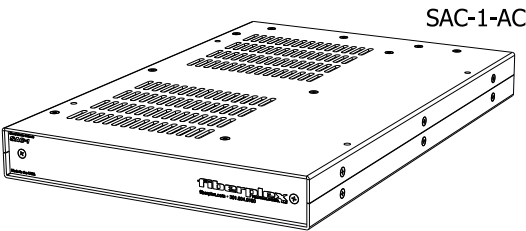
## Disclaimer

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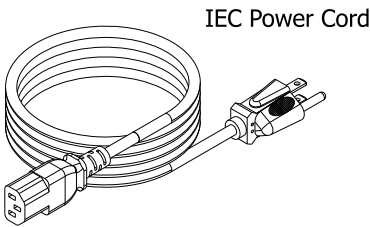
The information in this document has been carefully checked and is believed to be accurate at the time of publication. However, no liability is assumed by FiberPlex for inaccuracies, errors, or omissions, nor for loss or damage resulting either directly or indirectly from use of the information contained herein.

# Hardware Contents

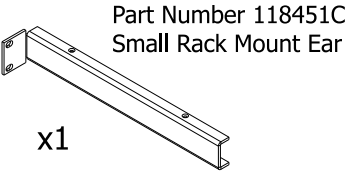
In addition to the SAC-1-AC chassis and power cord, the following hardware parts are included to facilitate all of the possible mounting options for the SAC-1-AC. Please inspect your package to ensure all pieces are available:



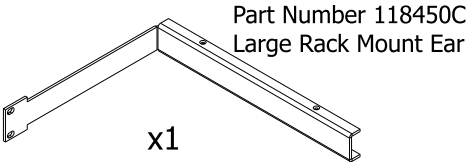
x1



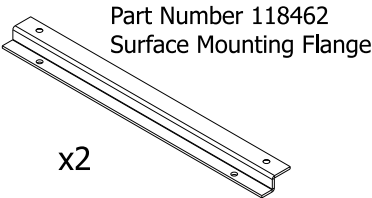
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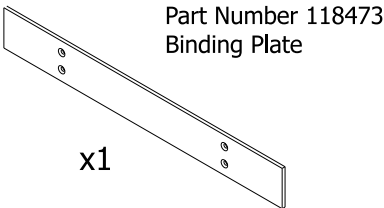
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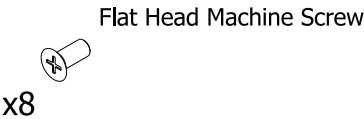
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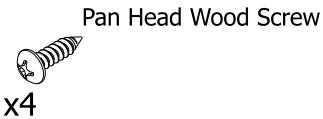
x2



x1



x8



x4

## Introduction

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The FiberPlex SAC-1-AC is a standalone FOM card chassis, providing power, enclosure and secure mounting for a single Fiber Optic Module. Each SAC-1-AC may be rack, wall or desktop mounted utilizing the included components of the SAC-1 Mounting System.

- Possible bracket configurations are:
- Mounting to a desktop, wall or similar surface
- Rack mounting in a single installation, occupying 1U of vertical space
- Rack mounting in a dual configuration, occupying 1U of vertical space

## Key Features

Clear face plate allows safe viewing of the FOM status display while the module remains protected

- Power entry and FOM interface cables are located at the rear of the unit
- Mounting configuration requires no disassembly of the chassis
- Cooling airflow is passive for silent operation

## Getting Started

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### Initial Inspection

Immediately upon receipt, inspect the shipping container for damage. The container should be retained until the shipment has been checked for completeness and the equipment has been checked mechanically and electrically. If the shipment is incomplete, if there is mechanical damage, or if the unit fails to operate notify FiberPlex and make the shipping materials available for the carrier's inspection.

### Chassis Mounting

Mount the chassis using the included bracket system. All fasteners necessary for the various installation options are included. Ensure that space exists below and above the ventilation slots at the installed position. The chassis should be located in an environment where an ambient temperature between 0° and 50° C can be maintained.

Front Indicators

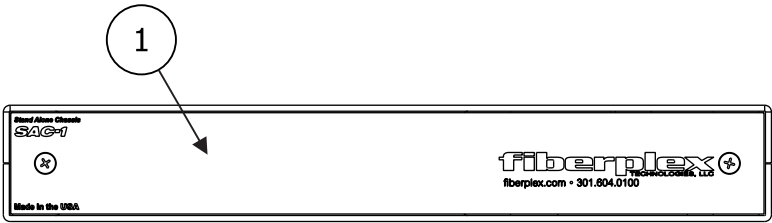


Figure 1 SAC-1-AC Front Face

- ① **Smoked Glass Face Plate** – Allows viewing of FOM status display panel and protects interior from dust and foreign object intrusion.

Rear Indicators/Connections

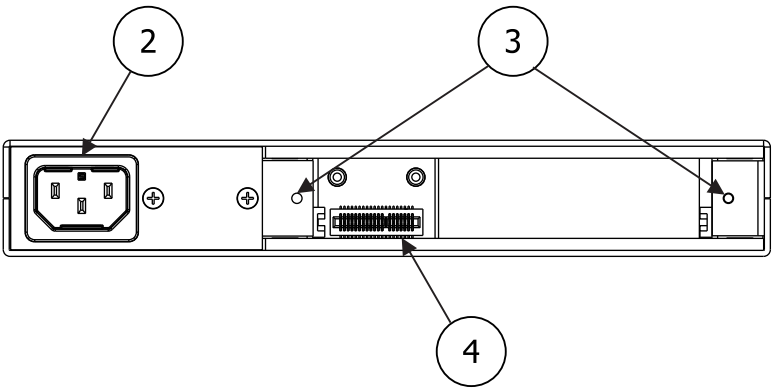


Figure 2 SAC-1-AC Rear Face

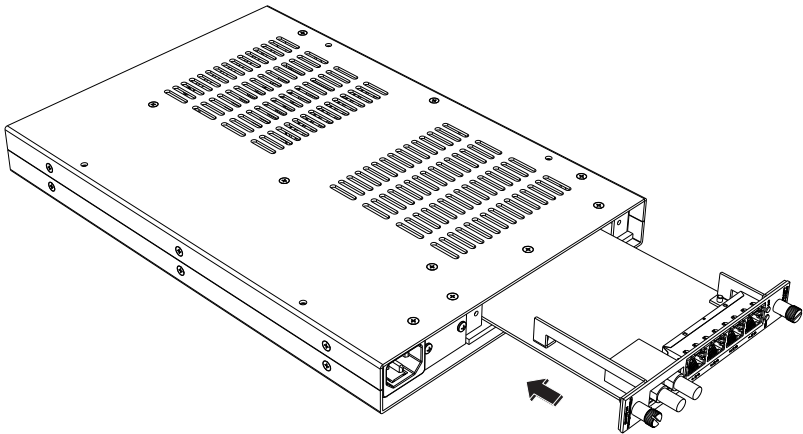
- ② **Standard IEC-320 Power Inlet** – For detachable power cord (included).
- ③ **FOM Mounting Holes** – Captive screws on FOM rear face secure here.
- ④ **Internal Edge Connector** – Mates with FOM gold finger edge connectors.

**Power Requirements & FOM Installation**

The SAC-1-AC power supply module accepts voltages from 100-240 VAC, 50/60 Hz. Maximum power consumption is approximately 16W for the FOMs with the greatest current draw. The chassis power supply is fused internally; no user-serviceable fuse may be accessed for replacement.

Although the FOM cards are designed and rated for hot swap capability, it is optimal practice to insert the module into the chassis prior to the application of AC power.

The FOM installation is shown below:

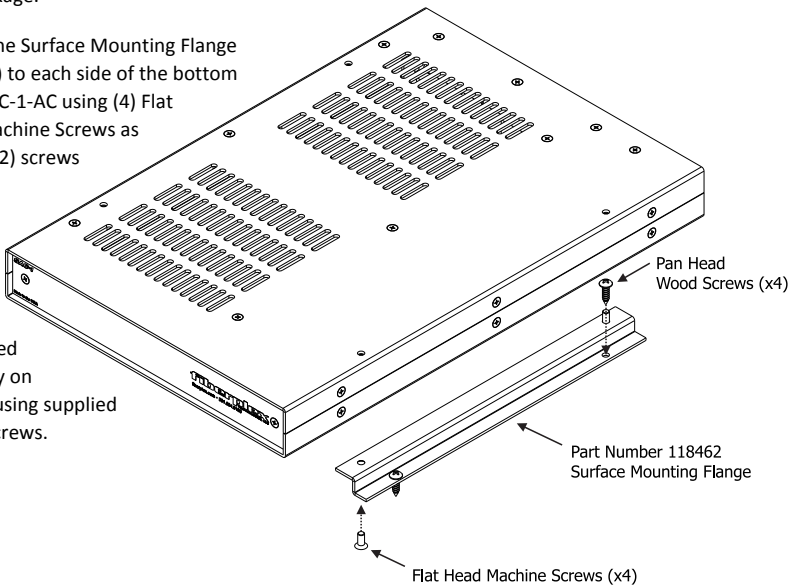


*Figure 3 Installing a FOM Card into the SAC-1-AC*

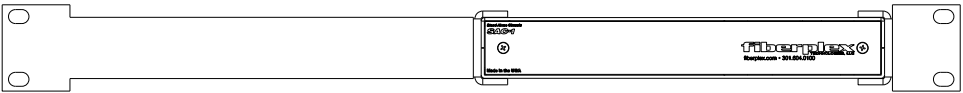
**Surface Mount Configuration**

The SAC-1-AC can optionally be surface mounted on any flat surface such as closet wall, rack wall or even the side of a desk. All of the parts necessary for surface mounting are included in the package.

- 1. Attach the Surface Mounting Flange (118462) to each side of the bottom of (1) SAC-1-AC using (4) Flat Head Machine Screws as shown, (2) screws on each flange.
- 2. Mount completed assembly on surface using supplied Wood Screws.

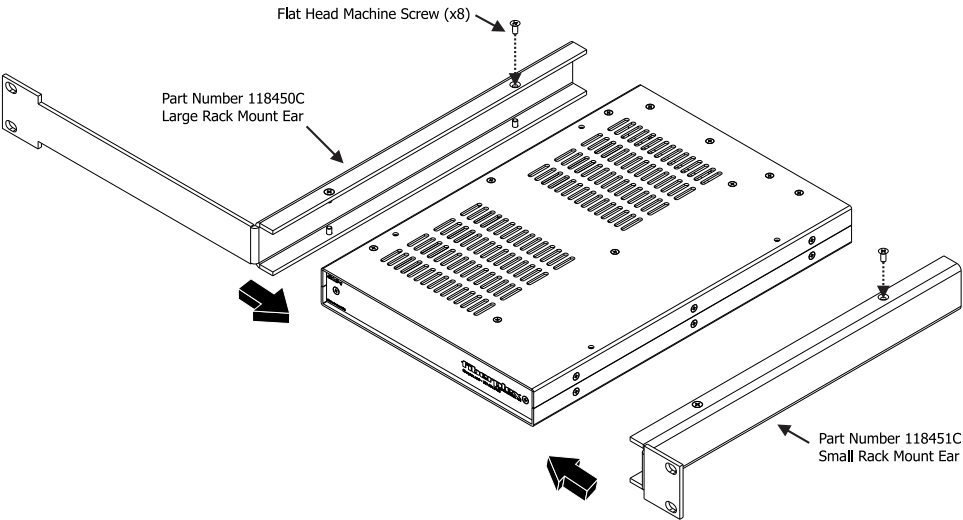


# Single Rack Mount Configuration



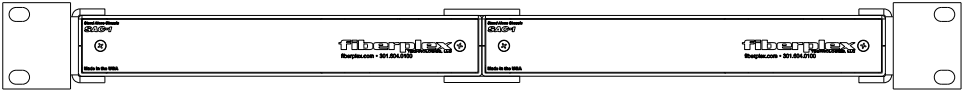
All the parts necessary to mount a SAC-1-AC in a 1U rack space are included in the package.

- 1. Attach the Small Rack Mount Ear (118451C) to the SAC-1-AC using (4) Flat Head Machine Screws as shown, (2) screws on top and (2) on the bottom.
- 2. Attach the Large Rack Mount Ear (118450C) to the opposite side using (4) Flat Head Machine Screws as shown, (2) screws on top and (2) on the bottom.
- 3. Mount the complete assembly into a standard 19" rack using customer supplied rack screws



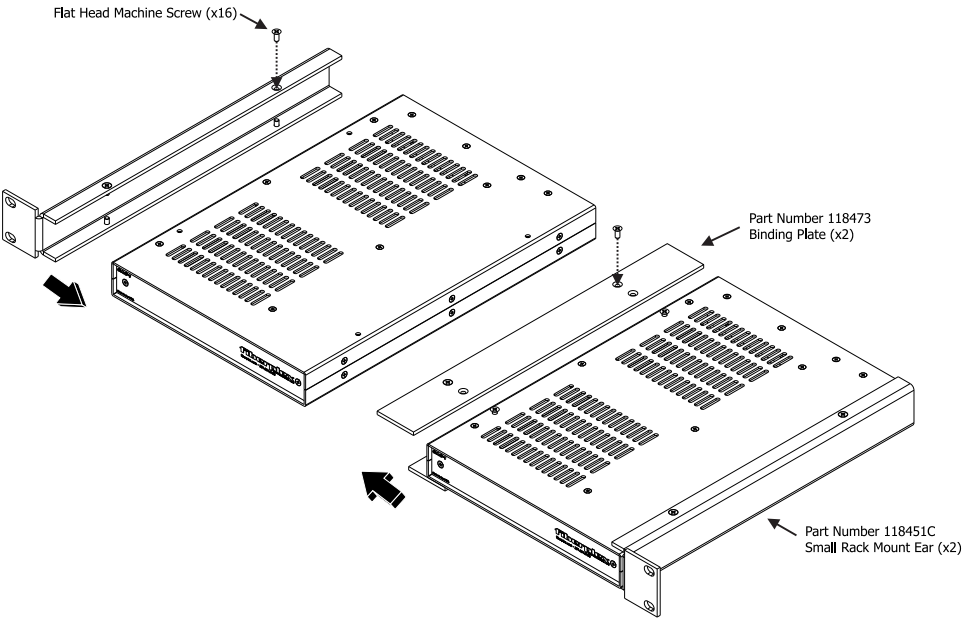


# Dual Rack Mount Configuration



Half of the parts necessary to mount (2) SAC-1-AC in a 1U rack space are included in each SAC-1-AC package. Together, all parts needed are supplied

1. Attach the Small Rack Mount Ear (118451C) to the right side of (1) SAC-1-AC using (4) Flat Head Machine Screws as shown, (2) screws on top and (2) on the bottom.
2. Attach another Small Rack Mount Ear (118451C) to the left side of the otherSAC-1-AC using (4) Flat Head Machine Screws as shown, (2) screws on top and (2) on the bottom.
3. Attach the Binding Plate (118473) to the right SAC-1-AC using (4) Flat Head Machine Screws as shown, (2) screws on top and (2) on the bottom.
4. Push the (2) SAC-1-AC together and install the (4) Flat Head Machine Screws in the remaining holes on the Binding Plate as shown, (2) screws on top and (2) on the bottom.
5. Mount the complete assembly into a standard 19" rack using customer supplied rack screws



Specifications

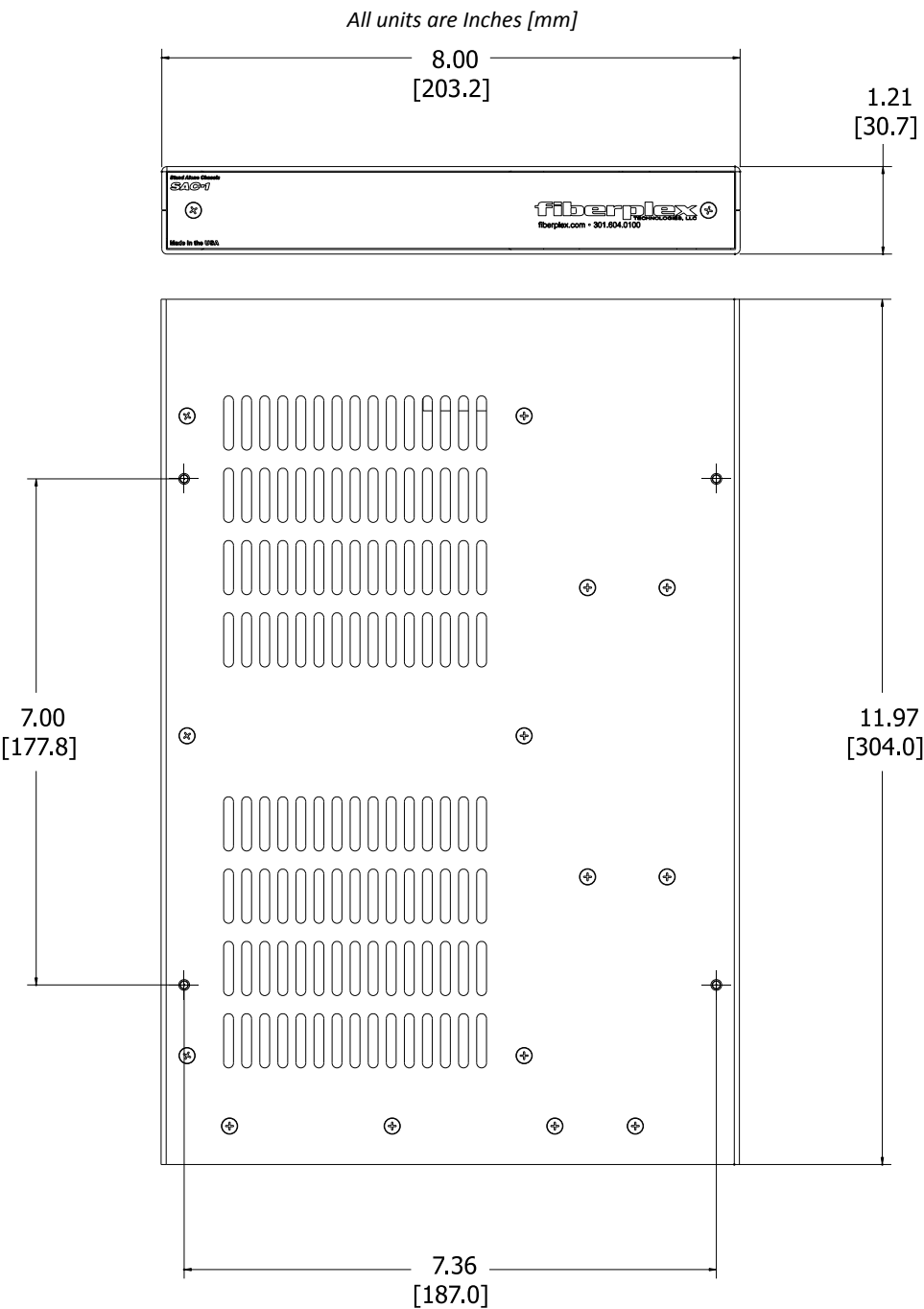


Figure 4 SAC-1-AC Dimensions

PHYSICAL SPECIFICATIONS				
	Length	Width	Height	Weight
Case Dimensions (1U)	11.97 in (304 mm)	8 in (203 mm)	1.21 in (31 mm)	2 lb (0.9 kg)
ELECTRICAL SPECIFICATIONS				
		Min	Typ	Max
Power Requirement	Voltage Range (VAC)	90	-	230
	Power Consumption (W)	-	12	16
Environmental	Storage Temperature (°C)	-40	-	85
	Operating Temperature (°C)	0	-	50

