



## **SPECIFICATION GUIDELINE FOR ES-SERIES ENCLOSURES**

### **840ES3048**

#### **Full Specification**

##### **General**

##### **84" High X 30" Wide X 48" Deep**

The enclosure must be Great Lakes product model #840ES3048

The enclosure must UL listed to UL 2416 (Standard for Audio/ Video, Information and Communication Technology Equipment Cabinet, Enclosure and Rack Systems) Dimensions shall be 84" High x 30" Wide x 48" Deep. Featuring mesh contour doors, Plexiglas doors, perimeter vented doors or solid doors split mesh, split fan or split solid doors. Also features locking lift-off solid or vented Side Panels. Removable solid, vented or fan top panels are also available. Doors, sides & tops are 16 Ga. Steel construction. The enclosure shall be constructed of cold rolled steel (CRS) utilizing a fully welded steel frame design with five bends in the corner post for superior strength. Rails are able to hold 3300 lbs. on levelers or bolted to floor. Shall have two pair of universal cage nut mounting rails that must be 19" EIA 310-E compliant. Rails must be infinitely adjustable front to back. Networking of multiple enclosures must be possible through the use of tool-less hardware. Manufacturer shall ship enclosure completely assembled including accessories such as cable management, shelves, & power strips. (Assembly must be per customer's instructions if provided) Manufacturer must be ISO 9001:2008 registered.

**Floor Mounting** The base unit frame shall have four separate floor mounting locations in the bottom. Threaded studs 5/16 to accommodate set of four (4) optional plate casters, threaded 1/2-13 holes to accommodate leveling glides and 3/4"Ø floor anchoring holes. Anti-tip option is to be fully retractable.

**Rack Mounting** Mounting rails shall be 12 Ga. infinitely adjustable with 44 rack mount unit (RMU) markings the complete length of the rail. RMU markings to start at bottom and count up. Universal (M6 or #10-32) cage nut rails shall be multi-vendor server compliant. Rails shall powder-coated and have pass through holes with cable management tie down slots both vertical and horizontal and 1/4"Ø holes located at every RMU position.

**Grounding** The base unit frame must have four (4) M6 x 12mm copper plated grounding studs located in bottom corners of the enclosure. Inside left rear top of the frame is to have a double 1/4 -20 threaded zinc-plated stud to allow for mounting of copper ground lug. All doors must include a minimum of two (2) M6 x 12MM copper plated grounding studs located at the top and bottom of the door and (1) ground wire assembly with disconnect. All side panels must include one (1) M6 x 12mm copper plated grounding stud located at the bottom of the side panel and (1) ground wire assembly with disconnect.

**Cable Management** The base unit frame must accommodate optional vertical and horizontal cable management lacing bar which is fully adjustable in the enclosure and allow for cable bundles in excess of 5". Rear must accept vertical cable troughs.

All 19" rack mount cable management must be installed at time of shipment.

**Cable Access** The top panel shall be removable. Top cabinet frame shall have a cable knock-out in the rear that is 7"D x 16" W, allowing for 112 square inches for cable access. Top to have an additional six (6) cable access knock-outs. (3.38" x 12") These openings are able to accept optional brush grommet kits.

Bottom to have four cable access openings. Center to have a cable access opening (minimum 14.36" x 23.25" for 334 sq. in.). Rear must have a cable access opening (minimum 3.50" x 18.00" for 63 sq. in.). Both rear corner posts shall have side cable knock-outs to allow for enclosure to enclosure cable pass-through. They will be 3.25" x 34.00" with two (2) per side.

**Doors** Mesh contour door must have easy latching, lockable handle. All other doors must fit flush with the base and swing open 180°. All doors will have three field-reversible hinges using only the hardware provided. Mesh doors shall be at least 64% open area for good ventilation. Base unit frames must have gasketing for the door openings. The following doors must be available as options: Mesh contour, smoked Plexiglas, solid, split mesh, split fan or split solid. (\*\*Mesh contour door does not fit flush.)

**Side Panels** The base unit frame must be able to accommodate locking, quick release, tool-less lift off side panels. Base unit frame must have gasketing for the side panel openings. The side panels should be flush with the base unit.

**Top Panel** Top panels shall be removable. Options shall be solid, vented, three-fan low profile assembly and single or dual ten-inch fan assemblies. Panels to accept ladder rack brackets and top mounted cable troughs.

**Hardware** Enclosure shall ship with package of cage nut hardware. (M6 or #10-32, Cage nuts & Screws)

**Power** The base unit frame must have the ability to mount three (5) vertical power strips mounted in each rear corner using button mounting. Front corner shall be able to accept one (1) power strip per side. Enclosures must be able to accept 12 x 19" rack mount 1 U high PDU's between EIA rails and side panels, (6) per side

### **Quick Spec.**

840ES3048

### **84" High X 30" Wide X 48" Deep**

The enclosure must be Great Lakes product model #840ES3048 & be UL listed to UL2416 Enclosure frame must be fully welded and be constructed out of cold rolled steel (CRS) utilizing a fully welded steel frame design with five bends in the corner post for superior strength and be able to hold 3300 lbs.

Dimensions shall be 84" High, 30" Wide, 48" Deep.

Doors must fit flush with the base and swing open 180° and be of 16 Ga. CRS. All doors must have three (3) field-reversible hinges using only the hardware provided. Mesh doors shall be 64% open area for good ventilation. (\*\* Mesh contour door does not fit flush.)

Enclosure shall have two (2) pair of 12 Ga. universal cage nut mounting rails that are 19" EIA 310-E compliant. Rails must be infinitely adjustable and have (44) RMU markings counting from bottom up.

Enclosure frame must allow for optional leveling glides, casters, floor mounting. Enclosure shall have copper plated grounding studs on base unit doors, sides and tops.

Top panels shall be removable.

Enclosure shall have 112 sq. in. top rear cable knock out. The bottom shall have cable entry of 334 sq. in.

The base unit frame must be able to accommodate flush, gasketed, locking, quick release, tool-less lift off solid or vented side panels.

Enclosure must accommodate optional vertical or horizontal cable management lacing bar that is fully adjustable in the enclosure. Rear corner post must be able to accept one (1) or two (2) vertical cable troughs.

All 19" rack mount cable management must be installed at time of shipment.

The base unit frame must have the ability to mount three (5) vertical power strips mounted in each rear corner using button mounting capability.

Networking of multiple enclosures must be able to be done by using tool-less hardware. Manufacturer shall ship enclosure completely assembled including accessories such as cable management, shelves, & power strips.

(Assembly must be per customer's instructions if provided) The Enclosure shall ship with package of cage nut hardware as specified by customer.

Manufacturer must be ISO 9001:2008 registered.