

Eaton SES Racks

The perfect choice for your IT requirements

Flexible. Scalable. Affordable.



EATON

Powering Business Worldwide

Quick implementation at the Server and Network rooms

Standardize your implementations around the world and bring them online faster with the Eaton SES Racks. The Eaton SES Racks support a wide variety of equipment, including: servers, storage, switches, routers, PDUs, UPSs, console part servers and KVM switches.

The SES racks are delivered for HIGH, MEDIUM and LOW density environments to serve your mission critical needs.

The SES racks will be offered in two formats:

- **Factory assembled version**
- **CKD version (Completely Knocked Down)**

Eaton SES Racks - Advantages



Available in 7 standard dimensions



1000 kg load bearing capacity on the 19" angles



Front convex door has 86% perforation and is hinged on either side with a 2-point locking system



Rear perforated door has a split version with a 2-point locking system



Full depth adjustability of the 19" rails



Removable top panels with cable entry provisions for the Cat6 cables or the PDU power plugs



Split side panels with single locking slam latch allowing for easy single person removal/installation



Two universal PDU mounting brackets



Castors to move the cabinet around and levelling feet for a solid and stable base

Key Features



Cable Entry Openings on the Top Cover

Cable Entry provisions take multiple Cat6 and power cables.

Doors: front convex door

With **86%** perforation for better cooling in small, medium and high density data centers. **Rear split perforated doors** for heat removal.

19" Integrated mounting angles

Ensure proper position of 19" rails without measurement for mounting the Servers, Storages, Switches, UPS System and KVM Switches.

Universal PDU mounting brackets

PDU Brackets ensure the proper mounting of the PDUs on the rear side of the racks for power distribution.

Split type lockable side panels

For quick assembly and maintenance, the split lock provides security for the IT components.

Castors with leveling feet

Castors will help to move the server racks around the data center room, and levelling feet will help you to create a solid and stable base on the floor.

Eaton SES Server and Network Racks

Eaton Part No.	U	Height (in mm)	Width (in mm)	Depth (in mm)
CKD VERSIONS				
SES-42U-6x10-CKD	42	2114	600	1000
SES-42U-8x10-CKD	42	2114	800	1000
SES-42U-6x12-CKD	42	2114	600	1200
SES-42U-8x12-CKD	42	2114	800	1200
SES-36U-6x10-CKD	36	1847	600	1000
SES-27U-6x10-CKD	27	1447	600	1000
SES-18U-6x10-CKD	18	1026	600	1000
FACTORY ASSEMBLED VERSIONS				
SES-42U-6x10-H1	42	2114	600	1000
SES-42U-8x10-H1	42	2114	800	1000
SES-42U-6x12-H1	42	2114	600	1200
SES-42U-8x12-H1	42	2114	800	1200
SES-36U-6x10-H1	36	1847	600	1000
SES-27U-6x10-H1	27	1447	600	1000
SES-18U-6x10-H1	18	1026	600	1000



Complete Rack Includes

- Front single convex door with 86% perforation with a 2-point lock and a Swivel Handle.
- Rear perforated double door with a 2-point lock and a Swivel Handle.
- Top cover with Cable Entry Provision.
- 1 pair of split locking side panels.
- 2 pairs of 19" angles front and rear for mounting the IT components.
- Bottom covers with Castors and Levelling feet.
- Keys



Technical Features

Frame:

- Frame capable of a load bearing capacity of **1000Kg** for 42U racks
- Bottom end frame mounted with Castors and Levelling Feet
- 7-fold aluminium profile with steel and frame assembly top and bottom

Colors available:

- RAL 9005
- Special colors on request

Standards:

- Comply to **DIN41494** or equivalent
- Comply to **IEC 297** (19" standard)

Doors and side panels:

- Front convex perforated door with a 2-point locking system
- Rear split perforated door with 2-point locking system and Swivel handles
- Side panels lockable type split version
- Front door with **86%** perforation exceeds the IT equipment manufacturer's specifications

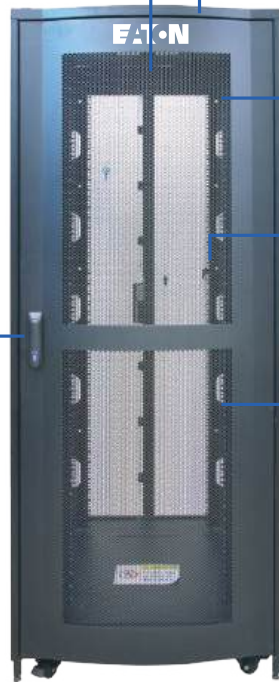


Top cover:

- Top cover with Cable Entry Provisions with a cover plate. Depth markings included on frame for easy alignments, allowing maximum no. of CAT-6 cables or PDU cables
- Provision for the cooling fan tray assembly
- Two pairs of vertical cable managers on the front and rear side with an 800mm width and closure for the network cable management

EIA 19" mounting rails:

- 2 pairs of full height 19" mounting rail that accept cagenuts, U marking on each front and rear rail
- Full depth adjustability within the usable space
- Depth markings included on frame for easy alignment



Biometric and Intelligent Sensors

Customers have serious concerns with the safety of racks, temperature data and so on. Only Eaton provides the option of converting normal racks to intelligent ones with the following options:

- Biometric locking system with electronic locks.
- 3 zone temperature and 1 humidity sensor/ system
Smoke sensor
- CCTV system with 1 camera and 1 TB hard disk
- Gateway system
- Smart power distribution module with branch circuit monitoring to understand the load requirements for the single rack and two rack solutions



Note: Split side panels feature will not be available for the 18U and 27U racks.



Eaton SES Rack Accessories

Blanking Panels

19" mounted tool-less blanking panels allow you to cover the unused U space in the SES server racks for better air flow management.

Color: RAL 9005

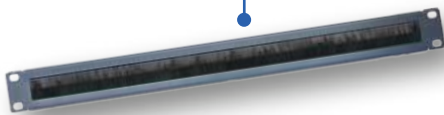
Eaton Part No.	Description
SES-H1-BIP1U	1U Blanking Panels
SES-H1-BIP2U	2U Blanking Panels



Brush Panels

The 19" rail brush strips prevent air re-circulation within the rack by sealing the cable pass-through holes.

Color: RAL 9005



Eaton Part No.	Description
SES-H1-BRP1U	Brush Panel 1U

Component Shelf

Component Shelves are perfect support for non-rack mountable IT equipments, such as Routers, Hubs and Monitors.

Color: RAL 9005

Eaton Part No.	Description
SES-H1-FTFM	Component Tray 720mm depth
SES-H1-HTFM	Component Tray



Rotating Keyboard Tray

Rotary Keyboard Tray allows to mount the different sizes of the keyboards for KVM applications.

Color: RAL 9005



Eaton Part No.	Description
SES-H1-KBT	Rotating Keyboard Tray
	Component Tray

Cooling Fan Tray

Cooling fan trays with fans assembly are used to help facilitate air flow within the rack by adding ventilation where it is needed most. Cooling fan tray units that sit directly on top of the rack enclosures.

Features:

- Illuminated on/off switch conveniently located on the front panel
- 230VAC, 50Hz/60Hz operation
- CE listed fans with long life sleeve bearing
- Detachable power cord
- Finish: RAL 9005



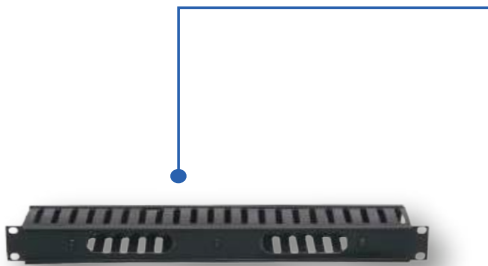
Eaton Part No.	Description
SES-H1-FTWF	Fan tray with 4 fans

Fan Details:

Eaton Part No.	Description
SES-H1-CFM90	Fan for the rack 230V, 90CFM

Thermostat for the Fan Tray:

Eaton Part No.	Description
SES-H1-FTWF-TS	Thermostat for fan tray - 0-50°C



Cable Manager

Horizontal cable managers are capable of managing cables on the front and rear of any 19" rack. They ensure optimal cable radius to prevent deterioration or breakage. Flexible fingers maximize the care and protection of the equipment and cables, keeping the structured cabling system unhurt and totally functional. The removable cover makes it easy to add or remove bundled cables quickly.

Eaton Part No.	Description
SES-H1-CM1U	1U Cable manager plastic

Captive Hardware

Cage nuts and screws allow to mount the IT equipment on the server racks and network racks. Cage nuts are with M6.

Eaton Part No.
SES-H1-HWMK



Eaton Power Distribution Units

A **power distribution unit (PDU)** is a device fitted with multiple outputs designed to distribute electric power, especially to racks of computers and networking equipment located within a [data center](#).

Basic power distribution units:

Eaton Basic PDUs have 0U, 1U and 2U form factors and a variety of output receptacle choices for reliable, cost-effective power distribution for all connected equipment in your server racks.

SES Family PDU Range:

Eaton Part No.	Description
SES-IN-PDU-32A-0U	Indian 12 socket with 5 Pin 5/15A Outlets) PDU with 32A breaker with indicator and 1.5 Mtr cable hardwired
SES-IN-PDU-16A-2U	Indian 6 socket with 5 Pin 5/15A Outlets) PDU with 16A breaker with indicator and 1.5 Mtr cable with 3pin top
SES-IN-PDU-16A-1U	Indian 6 socket with 3 Pin 9A outlet PDU with 9A fuse with indicator switch and 1.5 Mtr cable with 3 pin Top
SES-GL-PDU-16A-1U	Global 6 socket with 3 Pin 9A outlet PDU with 9A fuse with indicator swtich and 1.5 Mtr cable with 3 pin Top



IEC PDU with LCD Meter: Eaton Basic PDU with LCD Meter allows to get the Information of Power and the Racks temperature display.

Eaton Part No.	Description
SES-IEC-PDU-32A-0U	IEC 32A PDU 0 U with Digital LCD Meter and 28 outlets (24 C13 + 4 C19 Outlets) with 1.5 Meter Input Cable (Meter displaying V A T & Rh) with 1.5 Mtr hardwired input cable



Basic IEC Range

Eaton Part No.	Description
802001001	B-PDU,1U ,16A 1P C20, C13 x 12,0 230/230V
802001002	B-PDU,1U 12,16A 1P IEC309, C13 x 12, 230/230V
802001003	B-PDU,ZU 22,16A 1P IEC309 C13x20,C19 x 2 , 230/230V
802001004	B-PDU,ZU 20,32A 1P IEC309 C13 x 20,0 230/230V
802001005	B-PDU,ZU 30,32A 1P IEC309 C13 x24,C19 x 6 230/230V
802001006	B-PDU,ZU 42,32A 1P IEC309 C13 36,C19 x 6 230/230V
802001007	B-PDU,ZU 30,16A 3P IEC309 C13 x 24,C19 x 6 400/230V
802001008	B-PDU,ZU 42,16A 3P IEC309 C 13x 36,C19x6 400/230V
802001009	B-PDU,ZU 24,32A 3P IEC309 C13 x12,C19x12 400/230V
802001010	B-PDU,ZU 42,32A 3P IEC309 C13 x 30,C19 x 12 400/230V





Metered Power Distribution Units

Eaton input metered intelligent PDU includes energy metering with advanced power and environmental monitoring options. Metering at the phase input and internal circuit breaker levels allows comprehensive overload monitoring and advanced alerts.

Eaton Part No.	Description
802002001	M-PDU,1U ,16A 1P C20, C13 x 12,0 230/230V
802002002	M-PDU,1U 12,16A 1P IEC309, C13 x 12, 230/230V
802002003	M-PDU,ZU 24,16A 1P IEC309 C13x20,C19 x4 , 230/230V
802002004	M-PDU,ZU 16,32A 1P IEC309 C13 x 12,C19 x 4 230/230V
802002005	M-PDU,ZU 24,32A 1P IEC309 C13 x20,C19 x 4 230/230V
802002006	M-PDU,ZU 34,32A 1P IEC309 C13 28,C19 x 6 230/230V
802002007	M-PDU,ZU 42,32A 1P IEC309 C13 36,C19 x 6 230/230V
802002008	M-PDU,ZU 30,16A 3P IEC309 C 13x 24,C19x6 400/230V
802002009	M-PDU,ZU 24,32A 3P IEC309 C13 x36,C19x6 ,400/230V
802002010	M-PDU,ZU 24,32A 3P IEC309 C13 x 12,C19 x 12 400/230V
802002011	M-PDU,ZU 42,32A 3P IEC309 C13 x 30,C19 x 12 400/230V



Switched power distribution units:

Eaton input metered outlet switched intelligent PDU combines energy metering, power and environmental monitoring with remote outlet on/off switching to monitor, protect, and manage the rack environment. Utility grade metering at the phase input and internal circuit breaker levels provides comprehensive overload monitoring. **Remote on/off control** allows authorized users to power-cycle remote equipment and implement rack-level power access controls to power on/off each outlet.

Metering Attributes: Voltage(V), Current(A), Apparent Power(kVA), Real Power(kW), Power Factor, Energy (kWh).

Eaton Part No.	Description
802003001	S-PDU,1U 8,16A 1P C20 C13 x 8, 230/230V
802003002	S-PDU,ZU 16,16A 1P C20 C13 x 12,C19 x 4 230/230V
802003003	S-PDU,1U 8,16A 1P IEC309 C13 x 8, 230/230V
802003004	S-PDU,ZU 24,16A 1P IEC309 C13x20,C19x4 230/230V
802003005	S-PDU,2U 16,32A 1P IEC309 C13 x 12,C19 x 4 230/400V
802003006	S-PDU,ZU 24,32A 1P IEC309 C13x20,C19x4 230/400V
802003007	S-PDU,ZU 32,32A 1P IEC309 C13x24,C19x8 230/230V
802003008	S-PDU,ZU 40,32A 1P IEC309 C13x34,C19x6 230/230V
802003009	S-PDU,ZU 24,16A 3P IEC309 C13x18,C19x6 400/230V
802003010	S-PDU,ZU 36,32A 3P IEC309 C13x30,C19x6 400/230V
802003011	S-PDU,ZU 24,32A 3P IEC309 C13x12,C19x12 400/230V
802003012	S-PDU,ZU 36,32A 3P IEC309 C13x24,C19x12 400/230V



Eaton Environmental Sensors

Sensor:

Eaton Part No.	Description
SES-FBL	Finger Print Locking with Electronic Lock
SES-H1-CMV-NVR	Camera with NVR, 1TD Hard Disk & connecting cables
MDC-3T1H	3x Temperature Sensor & Humidity Combo Sensor
HRD-XTSM	Smoke Sensor
HRD-RR2T	Rodent Repellent system
HRD-WLD10	Water Leakage Detection Sensor
SES-MPDM	Matered Powered Distribution Module
MDC-GATEWAY-E	Gate Way Hub

Eaton Brightlayer Software

The SmartEdge enclosure system seamlessly integrates the physical infrastructure of the computer room and data center to provide an efficient and integrated solution. The rack-level power supply, power distribution, thermal energy management, environmental monitoring, system connection, remote and distributed management are built into one system, providing an integrated solution with high reliability, easy maintenance, and high scalability.

Software - Intelligent Power Manager

Benefits:

Contextual Visibility:

- Choose an enclosure system vs an IT Rack for edge sites.
- Smart enclosures can give surprisingly more value than simple IT Racks at a fraction of the cost.

Automation & Resiliency:

- Intuitive business continuity policy automation at VM & cluster level.
- Remote, graceful shutdown of physical and virtual IT infrastructure.
- Automated control of power infrastructure.



Visual
Power Manager

Intelligent
Power Manager
Understand Edition

Intelligent
Power Manager
Manage Edition

Intelligent
Power Manager
Optimize Edition



Rack Visualisation



Automation Platform

About **EAT•N**

Eaton's mission is to improve the quality of life and the environment through the use of power management technologies and services. Eaton provides sustainable solutions that help its customers effectively manage electrical and mechanical power – more safely, more efficiently, and more reliably. Eaton's 2022 revenues were \$20.8 billion, and the company sells products to customers in more than 175 countries. Eaton has approximately 85,000 employees. Eaton firstly established a presence in the Asia Pacific region during the 1970s. Since then, the company's presence has grown significantly with a fast-growing network of sales and marketing offices, manufacturing plants, service centers and research facilities in the region.

Today, we have nearly 17,000 employees, 6 R&D centers and manufacture in 34 manufacturing facilities in countries and regions including China, India, Japan, South Korea, Singapore, Indonesia, Thailand, Philippines and Australia for all of Eaton's distinct business.

Eaton Power Quality Private Limited, India is a 100% subsidiary and a part of electrical sector of Eaton Corporation. We are catering to every industrial segment with versatile solutions which includes Switchgear: LV & MV Solutions, Fusegear: LV & MV solutions, UPSs and software solutions.

12 Acres World-class Manufacturing Facility in Pondicherry



100+
years of
experience

Operating in
175
countries

85,000+
employees

18,000+
patents

\$20.8
BILLION IN
SALES 2022