

ARCHITECTURAL SPECIFICATIONS

ONErack, Universal Racking system

(Mount any manufacturers, half rack or smaller devices, variable voltage power supply, and cooling system)

DESIGN

- Racking system shall include a 1 year warranty with system support for 1 years after discontinuance of the product.
- Racking system must allow mounting for any manufacturer's device (half rack or smaller). Racking systems that do not provide universal mounting compatibility shall not be accepted.
- Racking system must provide up to 6192 cm² in 4RU of mounting surface area, racking systems that do not provide up to 6192 cm² of mounting surface area in 4RU shall not be accepted.
- Racking system must provide up to 8352 cm² in 5RU of mounting surface area, racking systems that do not provide up to 8352 cm² of mounting surface area in 5RU shall not be accepted.
- Racking system must provide up to 10480 cm² in 6RU of mounting surface area, racking systems that do not provide up to 10480 cm² of mounting surface area in 6RU shall not be accepted.
- Racking system must provide at least 7 variable voltages from 5v – 24 volts DC at 35 watts per 387 cm² (4RU), 522 cm² (5RU), and 655 cm² (6RU), racking system that do not provide at least 7 variable voltages from 5v – 24 volts DC at 35 watts per 387 cm² (4RU), 522 cm² (5RU), and 655 cm² (6RU) shall not be accepted
- Racking system must provide a pass through for custom voltage at 35 watts from 3rd party power supplies per 387 cm² (4RU), 522 cm² (5RU), and 655 cm² (6RU), rack mounting systems that do not provide a pass through for custom voltage at 35 watts from 3rd party power supplies per 387 cm² (4RU), 522 cm² (5RU), and 655 cm² (6RU) shall not be accepted.
- Racking system must be UL certified, racking systems not UL certified shall not be accepted.
- Racking system must be FCC class A certified, racking systems not FCC class A certified shall not be accepted.
- Racking system must provide up to 2 different simultaneous voltages from 5v – 24 volts DC at 35 watts per 387 cm² (4RU), 522 cm² (5RU), and 655 cm² (6RU), racking system that do not provide up to 2 different simultaneous voltages from 5v – 24 volts DC at 35 watts per 387 cm² (4RU), 522 cm² (5RU), and 655 cm² (6RU) shall not be accepted
- Racking system must provide a 250 watt power supply which can be placed within the total 4RU, 5RU, or 6RU without using any extra rack space, racking systems that require additional rack space for the power supply shall not be accepted.
- Racking system must allow additional 250 watt power supplies to be added within the total 4RU, 5RU, or 6RU without using any extra rack space, racking systems that require additional rack space for the addition of power supplies shall not be accepted.
- Racking system must provide a 450 watt dual redundant power supply which can be placed within the total 4RU, 5RU, or 6RU without using any extra rack space, racking systems that require additional rack space for the power supply shall not be accepted.
- Racking system must allow additional 450 watt dual redundant power supplies to be added within the total 4RU, 5RU, or 6RU without using any extra rack space, racking systems that require additional rack space for the addition of power supplies shall not be accepted.
- Dual redundant power supply must be hot swappable from the front of the rack, power supplies that do not provide hot swappable PSUs from the front of the rack for service shall not be accepted.
- Dual redundant power supply must be load sharing, power supplies that do not provide load sharing shall not be accepted.
- Dual redundant power supply must provide AC surge protection, power supplies that do not provide AC surge protection shall not be accepted.
- Dual redundant power supply must provide DC surge protection, power supplies that do not provide DC surge protection shall not be accepted.
- Dual redundant power supply must provide DC power conditioning, power supplies that do not provide DC power conditioning shall not be accepted.
- Dual redundant power supply must provide LED indicators for Load and faults, power supplies that do not provide LED indicators for Load and faults shall not be accepted.
- Dual redundant power supply must provide a fault relay in the event of a PSU fault, power supplies that do not provide a fault relay in the event of a PSU fault shall not be accepted.
- Dual redundant power supply must provide resettable fuses, power supplies that do not provide resettable fuses shall not be accepted.
- Power supply must provide a service power port on the front of the rack, power supplies that do not provide power on the front of the rack for service shall not be accepted.

- Racking system must provide cooling to the entire system and fit within the total 4RU, 5RU, or 6RU without using any extra rack space, racking systems that require additional rack space for cooling will not be accepted.
- Cooling options must be powered by the internal power supply of the rack mounting system without using any extra rack space, racking systems that require additional rack space in order to power the cooling option shall not be accepted.
- Cooling options must be reversible to provide push or pull air flow through the entire rack mounting system, racking system without a reversible cooling option shall not be accepted
- Cooling options must provide speed adjustment from 50% - 100% of total capacity, cooling options that cannot be adjusted from 50% - 100% of total capacity shall not be accepted.
- Cooling options must provide at least 225 CFM of push or pull airflow, cooling options that do not provide 225 CFM of push or pull air flow shall not be accepted.

PROGRAMMING

- The ONErack mounting system is configurable with up to 16 slots, can contain multiple 250 watt power suppliers or 450w dual redundant power supplies, and closed with 3 different covers including a Fan cover, a window or a solid blank cover.
- All options come in three different sizes, 4RU, 5RU, and 6RU
- Cable management accessory is optional and fits all chassis, this option provides a rear anchor point for cable management.
- Full list of Parts for the ONErack system

ITEM	DESCRIPTION
1RK-4RU-BASIC-KIT	4RU kit includes Chassis, 6 modules
1RK-4RU-KIT	4RU kit includes Chassis, 6 modules and a 250w power supply
1RK-4RU-FAN	4RU Fan cover & PSU connector cable to be powered by 1RK-4RU-PSU
1RK-4RU-PSU	4RU 250w Power supply and accessories
1RK-4RU-PSU-2-HSWP	4RU 450w Dual Redundant, Hot Swappable Power supply and accessories
1RK-4RU-CHASSIS	4RU ONErack chassis
1RK-4RU-CVR-BLK	4RU blank cover
1RK-4RU-CVR-PLEXI	4RU windowed cover
1RK-4RU-MOD	4RU module plate, 1 module Voltage Selector & 1 rear dock, plus accessories
1RK-5RU-BASIC-KIT	5RU kit includes Chassis, 6 modules
1RK-5RU-KIT	5RU kit includes Chassis, 6 modules and a 250w power supply
1RK-5RU-FAN	5RU Fan cover & PSU connector cable to be powered by 1RK-5RU-PSU
1RK-5RU-PSU	5RU 250w Power supply and accessories
1RK-5RU-PSU-2-HSWP	5RU 450w Dual Redundant, Hot Swappable Power supply and accessories
1RK-5RU-CHASSIS	5RU ONErack chassis
1RK-5RU-CVR-BLK	5RU blank cover
1RK-5RU-CVR-PLEXI	5RU windowed cover
1RK-5RU-MOD	5RU module plate, 1 module Voltage Selector & 1 rear dock, plus accessories
1RK-6RU-BASIC-KIT	6RU kit includes Chassis, 6 modules
1RK-6RU-KIT	6RU kit includes Chassis, 6 modules and a 250w power supply
1RK-6RU-FAN	6RU fan cover & PSU connector cable to be powered by 1RK-6RU-PSU
1RK-6RU-PSU	6RU 250w Power supply and accessories
1RK-6RU-PSU-2-HSWP	6RU 450w Dual Redundant, Hot Swappable Power supply and accessories
1RK-6RU-CHASSIS	6RU ONErack chassis
1RK-6RU-CVR-BLK	6RU blank cover

1RK-6RU-CVR-PLEXI	6RU windowed cover
1RK-6RU-MOD	6RU module plate, 1 module Voltage Selector & 1 rear dock, plus accessories
1RK-XTRA-PWR	Rear dock and module PCB for additional Voltage Selector on Top Row for any sized module (requires one 1RK-XTRA-RAIL per chassis)
1RK-XTRA-RAIL	additional horizontal rails for adding second row of Voltage Selectors (1RK-XTRA-PWR)
1RK-CBL-MGMT	Adjustable cable management accessory, attaches to rear of any ONErack chassis
1RK-FAN-PSU	optional 12v PSU for Fan covers
1RK-PSU-HSWP	Replacement PSU cartridge for dual redundant PSU

TECHNICAL SPECIFICATIONS

ITEM	DESCRIPTION
ONErack Chassis	
Size D+H+W	4RU; 14in x 7in x 19in (366mm x 177mm x 483mm) 5RU; 14in x 8.7in x 19in (366mm x 221mm x 483mm) 6RU; 14in x 10.43in x 19in (366mm x 265mm x 483mm)
Weight (empty)	4RU; 6.3lbs (2.88kg), 5RU; 7.5lbs (3.38kg), 6RU; 8.6lbs (3.88kg)
Module weight	4RU; 0.98lbs (0.44kg), 5RU; 1.15lbs (0.52kg), 6RU; 1.33lbs (0.6kg)
Area per slot**	4RU; 60.1in ² (387cm ²), 5RU; 80.9in ² (522cm ²), 6RU; 101.6in ² (655cm ²)
Power per dock	max 35w
Power per slot	max 2x 35w (requires optional 2nd power dock)
DC Voltages per slot	5v@7A, 7.5v@4.7A, 9v@3.9A, 12v@2.9A, 13.5v@2.6A, 18v@1.9A, 24v@1.5A & Pass Thru
Pass Thru max	35 watts DC
Certifications	RoHS, CE, UL, FCC Class A
Max modules	16 (without internal PSU)
ONErack 250w Power Supply	
Size L+W+D	4RU; 12.6in x 5.67in x 1.74in (318mm x 144mm x 44mm) 5RU; 12.6in x 7.41in x 1.74in (318mm x 188mm x 44mm) 6RU; 12.6in x 9.14in x 1.74in (318mm x 232mm x 44mm)
Weight	4RU; 3.3lbs (1.48kg), 5RU; 3.9lbs (1.76kg), 6RU; 4.5lbs (2.04kg)
Main Output voltage	28v DC
Main output power	250w
Fan output voltage	12v DC (2-pin 3.5 mm detachable terminal block)
Fan output power	11 watts
Fan noise	28dBA @ 1 meter
BTU	1195 BTU
Certifications	RoHS, CE, UL, FCC Class A
AC input Voltage	90-264v AC
Thermal	0° - 40° C
Outlets Available	2x 28v DC daisy chainable (rear) 2x fan 12v DC (1x front, 1x rear) 1x 28v DC service output (front)

ONErack 450w Dual Redundant Power Supply	
Size L+W+D	4RU; 13.8 x 6.85 x 3.66" (350 x 174 x 93mm) 5RU; 13.8 x 8.60 x 3.66" (350 x 219 x 93mm) 6RU; 13.8 x 10.35 x 3.66" (350 x 263 x 93mm)
Weight	4RU; 3.92kg 5RU; 4.13kg 6RU; 4.34kg
Main Output voltage	28v DC
Main output power	450w
Dual redundant	yes, 2x 450w front removable cartridges
Hot Swappable	yes, 2x front removable cartridges
Load sharing	yes, max 450w on main output power
Active cooling	yes, 1x fan per removable PSU cartridge
Fan output voltage	12v DC (2-pin 3.5 mm detachable terminal block)
Fan output power	11 watts
IEC inlets	2x
BTU	1706 BTU
Certifications	RoHS, CE, UL, FCC Class A
AC input Voltage	90-264v AC
Thermal	0° - 40° C
Outlets Available	2x 28v DC daisy chainable (rear) 4x fan 12v DC (1x front, 3x rear) 1x 28v DC service output (front)
Fault Relay	2-pin 3.5 mm detachable terminal block 1A 30v AC/DC Normally open, closed on fault MOV arc suppression across contacts
ONErack Fan Cover, reversible	
Airflow	225 CFM max
Consumption	6w max
Speed Adjustment	100% down to 50%
Noise	39dBA – 50dBA @ 1 meter
Power	12v DC
Certifications	RoHS, CE, UL, FCC Class A