

ERack®

cp cases 

ERack®



Introducing ERack

Transporting mission-critical, fragile and heavy rack equipment has been made easier with ERack, a lightweight, robust rack case from CP Cases.

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Overview

ERack's patented monocoque design is constructed from 1.5mm high-tensile aluminium alloy and delivers an exceptional strength to weight ratio and all joints are seam welded using the very latest synergic pulse TIG technology.

Patented technology eliminates the edge extrusion, replacing it with an innovative folded rim design which makes the case stronger, lighter and more water and dust resistant. Special mounts protect against shock and the rack is up to 30% lighter than most other rack cases.

The unique design of the internal rack is created from RoHS compliant, high-tensile, anodised aluminium alloy, coated with Iridite NCP (Non Chrome Passivation), and means that ERack delivers enhanced lightness, rigidity and durability.

The robust design and special anti-vibration mounts ensure that electronic equipment is protected against shock, vibration and impact, regardless of orientation.

The floating inner rack chassis is mounted on eight elastomeric mounts, fixed to the outer body by robust anchor plates, which focus towards the centre of mass of the case. The chassis can easily be repositioned 25mm 'fore and aft' from the standard central position if required.

The chassis can move up to 50mm in any direction independently of the outer container, and a braided earthing (grounding) strap is fitted to maintain conductivity between the chassis and the body. Field-replaceable M6 stainless steel threaded cage nuts secure equipment and allow for easy switch-out of payload if required.

The folded-rim design eliminates edge extrusion, making the case stronger, lighter and more resistant to water and dust, resulting in an Ingress Protection rating of IP65.

This innovative approach provides excellent EMC/EMI shielding characteristics and exceptional beam strength (>100kg centre point load).

ERack gives the user access to the front and rear of any installed equipment via precision manufactured interchangeable lids, which are secured to the rack body by unique, patented quarter-turn latches. The specially designed latches feature fully recessed lobe knobs sculpted for easy grip even wearing arctic gloves.

Stainless steel latch spindles engage in striker sleeves located in the rack body, pre-aligning them as the lid is placed in position. Helical cams inside the striker sleeves draw the lid evenly to the body, providing optimum guaranteed seal compression, maintaining the structural integrity. Fully home, the latches are securely located in anti-vibration detents and an elastomeric seal on the spindle further prevents ingress of contaminants if the lid is displaced.

ERack can accommodate a payload of up to 50kg in its standard configuration. However, heavier payloads may be accommodated by double elastomeric or stainless steel wire rope mounts (further info available on request).

Designed for both commercial and military applications, this 19-inch ruggedised electronic transit rack offers protection against physical, climatic and electromagnetic hazards and is constructed from high-tensile aluminium alloy, making ERack ideal where weight, strength and portability are critical issues.



Shock-mounted aluminium transit case for 19-inch rack-mounted equipment, ideal where a lightweight and strong solution is required

Features

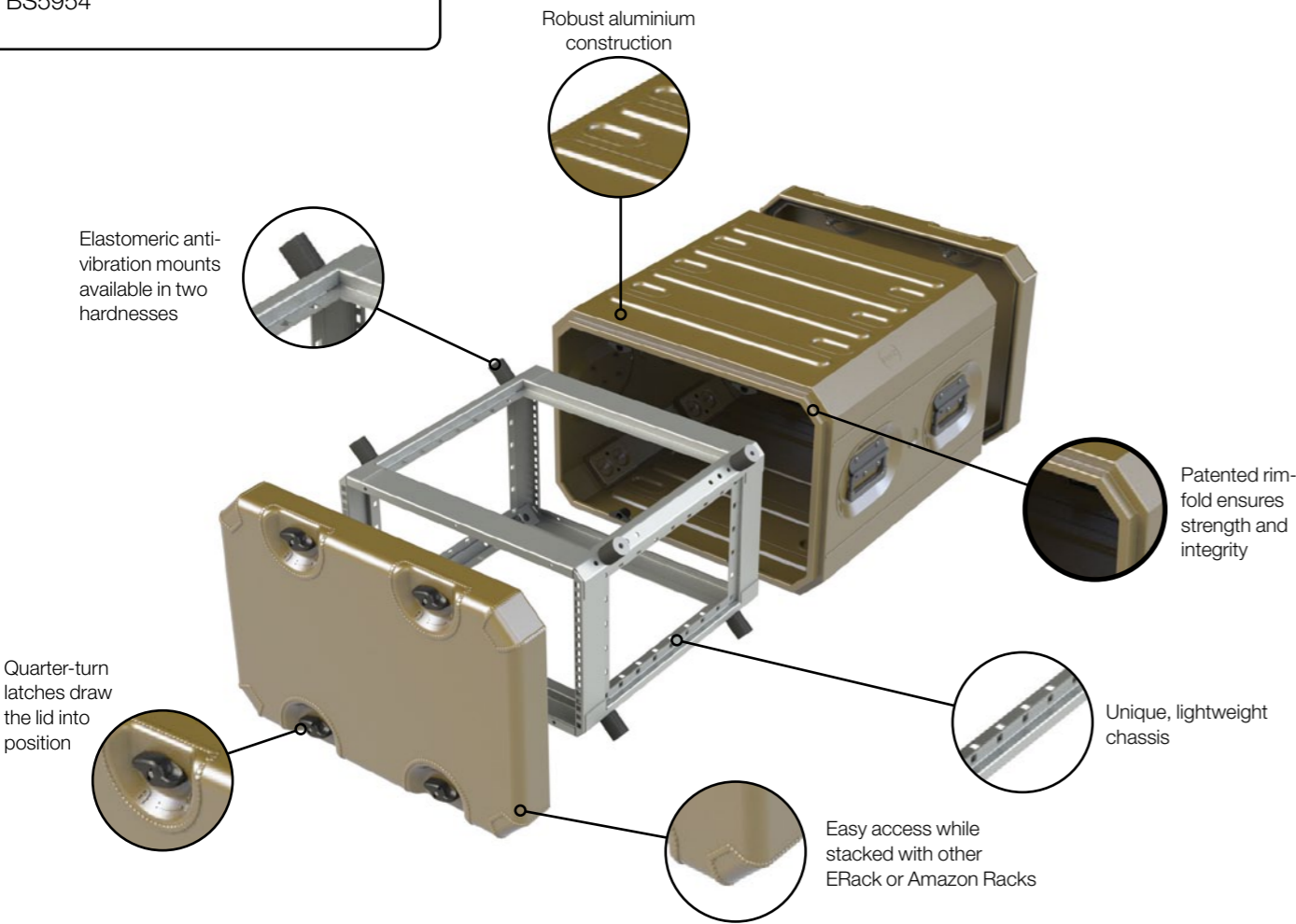
ERack

As with all CP Cases' products, ERack is fully customisable to suit individual client requirements; CP Cases has extensive experience in designing and manufacturing ruggedised OEM cases and containers, and are able to provide practical solutions for unique applications, when a case or an extremely tough container is required for deployment, transport or storage.

ERack carries the following accreditations and standards:

- MIL-STD-810F
- DEF STAN 00-35
- Ingress Protection rating 65
- RoHS compliant
- NATO stock numbers
- ANSI/EIA-310-C
- BS5954

- AI Aluminium** Rugged, 1.5mm high tensile aluminium alloy construction
- I Chassis Depth** Standard chassis depths: 480mm, 610mm, 740mm and 870mm
- HR Half Rack** designs also available
- Lids** Precision manufactured and interchangeable
- Lightweight** The 6U 480mm deep version weighs less than 14.7kg including lids
- Pat. Patented** Unique patented design
- Patented rim-fold** Innovative folded rim design, which eliminates edge extrusion and makes the case stronger, lighter and more resistant to ingress by water and dust
- Secure Closure** Recessed, sprung handles and quick release lid latches offer secure closure and allow front access when stacked
- U Sizing** Available in 3U to 12U sizes
- Stackable** with inter-locating ribs on container top and bottom surfaces
- Temperature** Stable in temperatures from -40°C to +70°C



Applications

Certification and accreditations are available on request

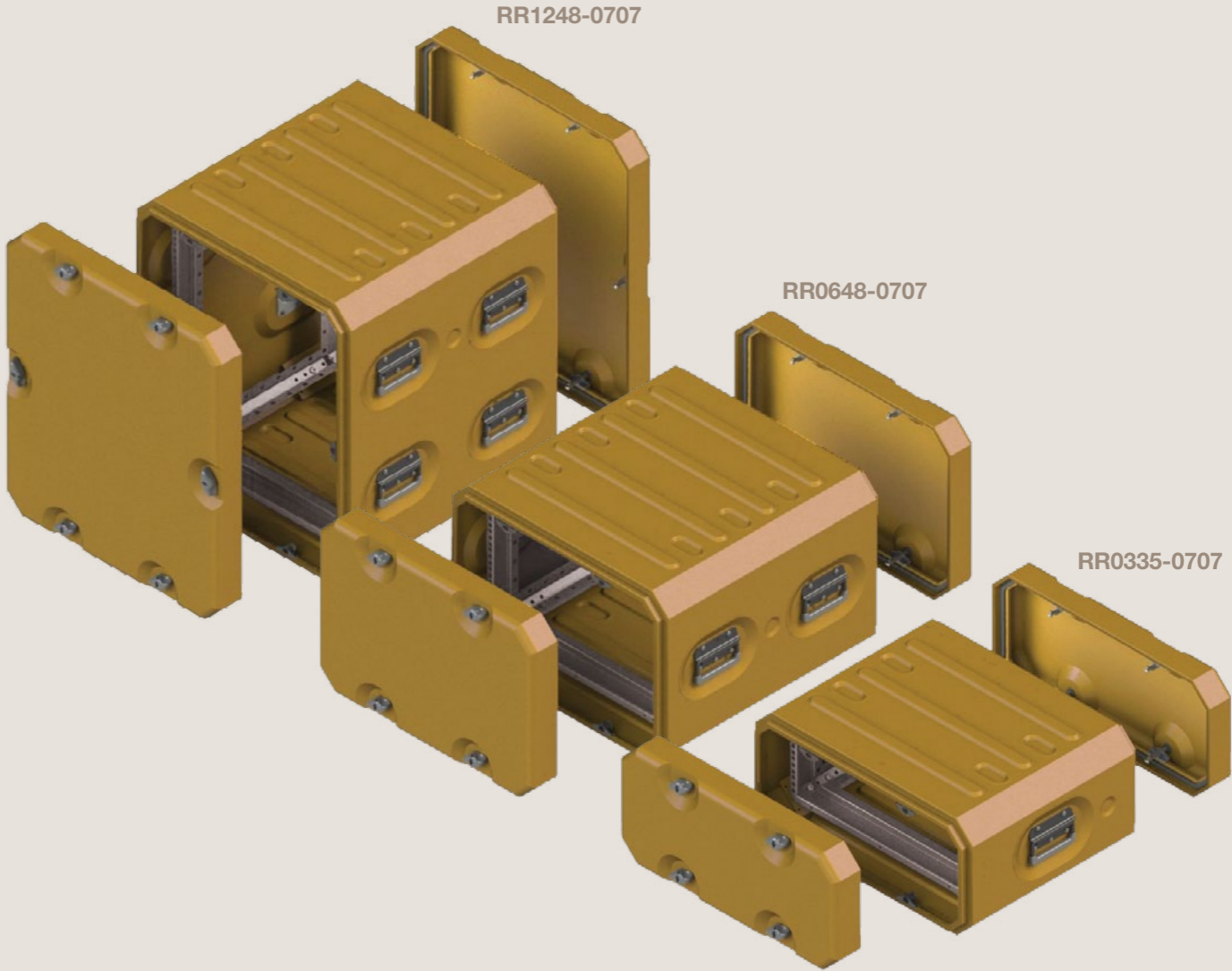


Size List

Part Number	External mm			U-Height	Chassis Depth	Volume	Weight*	Handles	Catches	NSN
	H	D	W	U	mm	m³	kg	No.	No.	
RR0348-0707	284	721	589	3	480	0.12	12.7	4	8	8145-99-836-9099
RR0361-0707	284	851	589	3	610	0.14	13.9	4	8	8145-99-668-8050
RR0374-0707	284	981	589	3	740	0.16	15.0	4	8	8145-99-155-8834
RR0387-0707	284	1111	589	3	870	0.19	16.1	4	8	8145-99-836-9429
RR0448-0707	329	721	589	4	480	0.14	13.5	4	8	8145-99-551-8724
RR0461-0707	329	851	589	4	610	0.16	14.6	4	8	8145-99-151-8189
RR0474-0707	329	981	589	4	740	0.19	15.8	4	8	8145-99-894-1507
RR0487-0707	329	1111	589	4	870	0.22	17.0	4	8	8145-99-151-8190
RR0548-0707	373	721	589	5	480	0.16	14.2	4	8	8145-99-226-1110
RR0561-0707	373	851	589	5	610	0.19	15.4	4	8	8145-99-347-5440
RR0574-0707	373	981	589	5	740	0.22	16.6	4	8	8145-99-402-0246
RR0587-0707	373	1111	589	5	870	0.24	17.8	4	8	8145-99-391-7213
RR0648-0707	417	721	589	6	480	0.18	14.9	4	8	8145-99-232-3372
RR0661-0707	417	851	589	6	610	0.21	16.1	4	8	8145-99-551-8725
RR0674-0707	417	981	589	6	740	0.24	17.4	4	8	8145-99-436-1871
RR0687-0707	417	1111	589	6	870	0.27	18.6	4	8	8145-99-290-6815
RR0848-0707	506	721	589	8	480	0.21	16.6	4	12	8145-99-737-3343
RR0861-0707	506	851	589	8	610	0.25	18.0	4	12	8145-99-151-7427
RR0874-0707	506	981	589	8	740	0.29	19.3	4	12	8145-99-726-2202
RR0887-0707	506	1111	589	8	870	0.33	20.7	4	12	8145-99-819-7293
RR1048-0707	595	721	589	10	480	0.25	18.1	4	12	8145-99-851-4709
RR1061-0707	595	851	589	10	610	0.30	19.5	4	12	8145-99-241-7262
RR1074-0707	595	981	589	10	740	0.34	20.9	4	12	8145-99-958-4913
RR1087-0707	595	1111	589	10	870	0.39	22.4	4	12	8145-99-667-7593
RR1248-0707	684	721	589	12	480	0.29	19.5	8	12	8145-99-305-8075
RR1261-0707	684	851	589	12	610	0.34	21.0	8	12	8145-99-614-0637
RR1274-0707	684	981	589	12	740	0.40	22.6	8	12	8145-99-446-7072
RR1287-0707	684	1111	589	12	870	0.45	24.1	8	12	8145-99-342-1208

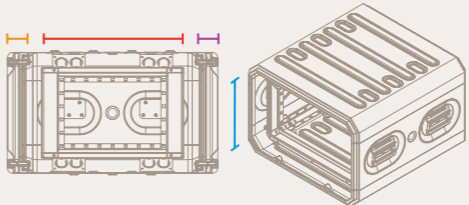
* Approximate weight
For additional weight with EasyGlide accessory, see page 8

Sizes and Numbering



Size Numbering System

RR	06	48	—	07	07
ERack	Unit U-height	Chassis depth (cm)		Lid depth Front (cm)	Lid depth Rear (cm)



Scale comparison of
ERack RR0648-0707
to a 6ft / 1.83m tall man

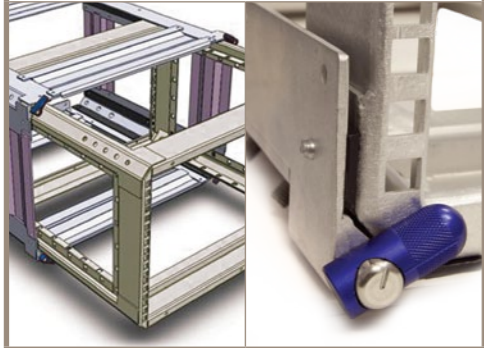
ERack Accessories

EasyGlide™ (Removable Chassis System)

Removable 'EasyGlide' chassis frame option allows the complete withdrawal of the 19" inner frame in constricted spaces or semi-permanent installations, without loss of anti-vibration characteristics. Add following to total weight if EasyGlide included:

480mm chassis: 1.7kg
610mm chassis: 2.0kg
740mm chassis: 2.4kg
870mm chassis: 2.8kg (E)


RREGS0448 for 4U chassis x 480mm deep
RREGS0461 for 4U chassis x 610mm deep
RREGS0474 for 4U chassis x 740mm deep
RREGS0487 for 4U chassis x 870mm deep
RREGS0648 for 6U chassis x 480mm deep
RREGS0661 for 6U chassis x 610mm deep
RREGS0674 for 6U chassis x 740mm deep
RREGS0687 for 6U chassis x 870mm deep
RREGS0848 for 8U chassis x 480mm deep
RREGS0861 for 8U chassis x 610mm deep
RREGS0874 for 8U chassis x 740mm deep
RREGS0887 for 8U chassis x 870mm deep
RREGS1048 for 10U chassis x 480mm deep
RREGS1061 for 10U chassis x 610mm deep
RREGS1074 for 10U chassis x 740mm deep
RREGS1087 for 10U chassis x 870mm deep
RREGS1248 for 12U chassis x 480mm deep
RREGS1261 for 12U chassis x 610mm deep
RREGS1274 for 12U chassis x 740mm deep
RREGS1287 for 12U chassis x 870mm deep



Stainless Steel Handles

Additional powder-coated stainless steel handles are available as surface mounted items only.

RRAAH



(E) = Estimated weight

Cable Storage Pouch

Zippered pouch that can be secured in place in both shallow and deep rack lids for the storage of cabling and leads. Cable pouches can be retrofitted by users without the use of tools.

RRASP0307/BK for 3U ERack
RRASP0407/BK for 4U ERack
RRASP0507/BK for 5U ERack
RRASP0607/BK for 6U ERack
RRASP0807/BK for 8U ERack
RRASP1007/BK for 10U ERack
RRASP1207/BK for 12U ERack





Lift/Tie Down Rings

Black powder-coated stainless steel tie-downs and lifting rings for when a freight solution is required.

AATD001/BK	RRTD001/BK
	
	

Elastomeric Mount Options

Stiffer elastomeric mounts are available for payloads in excess of 50kg. Elastomeric mounts can also be fitted in tandem at each corner of the internal suspended frame, to give a total of 16 anti-vibration mounts. This provides a controlled ride for very heavy loads.

AAAVM458 – factory fit 8 additional AV mounts, 45 shore hardness
AAAVM608 – factory fit 8 additional AV mounts, 60 shore hardness
AAAVM45 – supply only, 8 additional AV mounts, 45 shore hardness
AAAVM60 – supply only, 8 additional AV mounts, 60 shore hardness





Fasteners

Specially designed quarter-turn latches feature fully recessed lobe knobs sculpted for easy grip even wearing arctic gloves. These are standard on all ERack units.

RRATPF





Earthing/ Grounding Point

Earthing/grounding points can be fitted to allow for discharge of static electricity from the inner rack frame and its mounted equipment.

AAET



Wire Rope Anti-Vibration Mounts

Wire rope isolators can be fitted in place of elastomeric mounts. These are comprised of stainless steel stranded cable, threaded through aluminium alloy retaining bars, for effective vibration isolation. Their corrosion-resistance, all-metal construction, gives high-performance shock and vibration protection in hostile environments and are unaffected by temperature extremes, chemicals, oils, solvents and abrasives.

AAAVM60



Lid Hangers

For stowage of lids while the rack is in use. This is a factory fit only item.

RRALH/BK





Insect Hoods

Transparent membrane to protect sensitive equipment while still allowing visual access to the rack.

RRAMN03 for 3U ERack
RRAMN04 for 4U ERack
RRAMN05 for 5U ERack
RRAMN06 for 6U ERack
RRAMN08 for 8U ERack
RRAMN10 for 10U ERack
RRAMN12 for 12U ERack





Fixings

M6 Stainless Steel Cage Nut, Panel Screw and Finishing Washer (pack of 12).

AA423





Wheelboards

The ERack wheelboard allows heavy loads and stacked units to be easily manoeuvred. Loads up 300kg can be accommodated.

RRAWB48 for 480mm ERack
RRADWB61 for 610mm ERack
RRADWB74 for 740mm ERack
RRADWB87 for 870mm ERack





Support Shelf

Stainless steel full-width shelf to provide extra support for heavy payloads. (Self-colour shelf, inc fixings, provided)

AASSFW48 for 480mm frame
AASSFW61 for 610mm frame
AASSFW74 for 740mm frame
AASSFW87 for 870mm frame





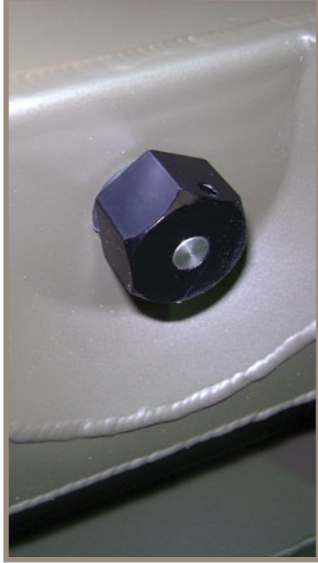

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ERack Accessories

Tamper-proof Latches

Specially designed hexagonal-head latch for additional security. Factory fit only.



RRATPF



Protective Skirts

For protection against the ingress of rain under operational conditions with the lid removed, a flexible rubber skirt can be fitted between the outer casing and the internal rack frame. It is important to ensure that equipment front panels are watertight to prevent water entry.

RRAPS03 for 3U ERack
RRAPS04 for 4U ERack
RRAPS05 for 5U ERack
RRAPS06 for 6U ERack
RRAPS08 for 8U ERack
RRAPS10 for 10U ERack
RRAPS12 for 12U ERack






EMC/EMI Gasket and Protective Skirts

To maintain the EMC integrity of the rack a specially designed gasket must be used in conjunction with the protective skirt.





RRAEMCG03 – EMC/EMI lid gasket, for 3U rack
RRAEMCG04 – EMC/EMI lid gasket, for 4U rack
RRAEMCG05 – EMC/EMI lid gasket, for 5U rack
RRAEMCG06 – EMC/EMI lid gasket, for 6U rack
RRAEMCG08 – EMC/EMI lid gasket, for 8U rack
RRAEMCG10 – EMC/EMI lid gasket, for 10U rack
RRAEMCG12 – EMC/EMI lid gasket, for 12U rack

RRAEMC03 – EMC/EMI protective skirt, for 3U rack
RRAEMC04 – EMC/EMI protective skirt, for 4U rack
RRAEMC05 – EMC/EMI protective skirt, for 5U rack
RRAEMC06 – EMC/EMI protective skirt, for 6U rack
RRAEMC08 – EMC/EMI protective skirt, for 8U rack
RRAEMC10 – EMC/EMI protective skirt, for 10U rack
RRAEMC12 – EMC/EMI protective skirt, for 12U rack



Automatic Pressure Relief Valve (PRV)



A two-way automatic pressure relief valve with manual override release push button enables equalisation of the pressure inside and outside the container.

RRAPRV Standard	RRAPRVEMI EMC/EMI Shielded
	
	

Humidity Indicator

Humidity indicator and replaceable desiccant container for effective humidity control during long-term storage.

AAHI3050





Applications in

- Aerospace
- Maritime
- Offshore & Geophysical
- Secure Telecommunications
- Satellite Uplinks

Other CP Products and Services

Climate Control

CP Cases Climate Control is a new offering covering air conditioning and climate control units for use in CP Cases' ERack.

Delivered either as a COOL-COLLAR™ or as an integrated unit, CPCC provides a one-stop-shop for 19-inch rack mount cases complete with air conditioning to maintain equipment's optimal operating conditions. Available in thermoelectric, for heating as well as cooling, and vapour compression, for high efficiency and volume, formats.

All CP Cases Climate Control units can be fitted with accessories including stowage pouches, wheel kits, pressure relief valves and humidity indicators.



COOL-COLLAR™

COOL-COLLAR™ is an air conditioning capability for 19-inch racks that utilises the patented ERack rim-fold to create an airtight and waterproof seal to allow the unit to function in extreme conditions. The unit is attached to an existing rack to maintain an optimum operation temperature for equipment.

Where a greater cooling requirement is needed, two COOL-COLLARs™ with AC units can be fitted to both the front and rear of the rack. Units are available up to 5000BTU (1465 watts) which can be fitted to 12U racks and collars.

Integrated Units

Built directly into the rack system, these climate control units provide cooling and heating, when required, automatically when temperature perimeters are met. Normally end-mounted, CP Cases offer the capability to integrate in a range of orientations to fit client requirements.

ERack Size Numbering System

Part Number*	Description	External mm			U-Height				kg
		H	W	D	U	No.	No.	No.	
RRCC 0629-0707 TEU	COOL Collar 6U 2 x 70 mm lid	419	615	416	6	2	8	N	8.79 (E)
RRCC 0829-0707 TEU	COOL Collar 8U 2 x 70 mm lid	508	615	416	8	2	10	N	10.29 (E)
RRCC 0829-0707 VCC	COOL Collar 8U 2 x 70 mm lid	508	615	416	8	2	10	N	10.13 (E)
RRCC 1029-0707 TEU	COOL Collar 10U 2 x 70 mm lid	597	615	416	10	2	12	N	11.59 (E)
RRCC 1029-0707 VCC	COOL Collar 10U 2 x 70 mm lid	597	615	416	10	2	12	N	11.63 (E)
RRCC 1229-0707 TEU	COOL Collar 12U 2 x 70 mm lid	686	615	416	12	4	12	N	11.99 (E)
RRCC 1229-0707 VCC	COOL Collar 12U 2 x 70 mm lid	686	615	416	12	4	12	N	13.18 (E)

* TEU = Thermoelectric Unit
VCC = Vapour Compression Cycle
(E) = Estimated weight

Weight listed is for COOL-COLLAR only.
Please contact CP Cases for air conditioner weights.
(E) = Estimated weight

SatRack™



Designed for Electronic News Gatherers and Media Professionals, operating across the globe, SatRack is a lightweight solution that can be carried on commercial airlines as checked luggage, saving time and avoiding additional baggage charges for those who need delicate electronic and satcom equipment to be quickly deployable and available immediately.

SatRack's novel and patented design is available in standard sizes of 3U, 4U and 5U versions with a 480 or 610mm deep, ultra-lightweight welded aluminium floating frame and is fully compatible with all 19-inch rack-mountable equipment. This design offers an exceptional strength-to-weight ratio and equipment panel fixing rails located at both ends of the frame allow for flexible mounting of kit. (Also available for 9.5-inch racks.)

Aluminium Cases



A triumph of strength and style, CP Cases aluminium cases protect their contents even under severe impact and are tougher, lighter and more resilient than traditional designs in laminated plywood.

CP Cases aluminium cases are the ideal balance between style and protection. Made from 2mm rigidised aluminium, cases are constructed without an edge corner weld to prevent seam splitting and the pre-pressed corners add extra strength and exceptional resistance to drop damage.

The inter-locking lid/body seal, with an integrated neoprene rubber gasket, protects contents against rain, dirt, dust and other environmental hazards.

Custom Solutions



CP Cases' design team can create a solution for any application that you or your products require. Designers are equipped with state-of-the-art capabilities and have extensive experience in diverse manufacturing processes including rotomoulding, blow moulding and injection moulding, vacuum forming, precision sheet metal work and traditional craft skills in a wide range of materials.

Amazon Cases & Racks™



Ideal for defence, marine, security, aerospace, oil and gas, satellite and telecommunication applications worldwide, Amazon Cases and Racks deliver exceptional strength to weight and are suitable where delicate or valuable equipment needs to be transported or stored safely.

Amazon Cases and Racks have a unique patented design that offers a tough, lightweight, customisable system that can be tailored to the client's requirements and individual needs.

Rugged Textiles



CP Cases manufactures a wide range of bags and covers for Original Equipment Manufacturers (OEMs), to provide a cost effective and practical solution for moving, deploying and protecting equipment and instrumentation. Products are widely used in the medical, defence, electronics and broadcast industries for a variety of applications.

Whether protecting expensive broadcast equipment from rain showers at Wimbledon, to sales presentation packs for artificial knee joints, or operational bags for aircraft testing equipment; CP Cases can provide a solution. The design team draws on years of experience with protective textiles to create the most cost-effective bag for your needs.

Foam Engineering



CP Cases can create foam protection systems to meet exacting project requirements for colour, multi-layering and special properties, by a variety of processes, including high speed CNC routing, laminating, drilling, blocking and hand sculpting. Calculating which density and composition of foam to use and the exact thickness required to produce the desired deceleration on impact, ensures the best protection possible.



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**TRUSTED
WHEN IT
MATTERS**

About CP Cases

CP Cases designs and manufactures high-performance, protective cases and racks used for transport, operation and storage of essential equipment in commercial and military applications.

Many of our products are accredited to MIL-STD-810F, rated IP65 and carry NATO stock numbers. With over 40 years' of expertise in producing cases, 19-inch rack solutions and rugged textile products, CP Cases has an unparalleled range of in-house skills and knowledge with materials and processes, including rotationally moulded products, plastic fabrication, aluminium, laminated plywood, HPP, textiles and CNC foam machining.

Full Capability Statement available on request.

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