# VEROTEC Electronics Packaging

Standard Products System Integration Contract Manufacture

# 19" Rack Cases

## 19" Rack Cases

#### STANDARD RACKCASES

19" rack cases are designed to offer a simple solution to many 19" mounting applications. The design allows numerous combinations to be assembled according to the application and hence offers total flexibility for the design engineer, using common piece parts. It also allows the case to be presented in a number of attractive finishes for individual product tailoring of 19" mounting applications.

Standard 1U-4U Rackcase components may be ordered separately; alternatively 1U-6U Rackcases can be configured in which case they are supplied fully assembled. Accessories include chassis trays to aid the mounting of internal components.

#### **FEATURES**

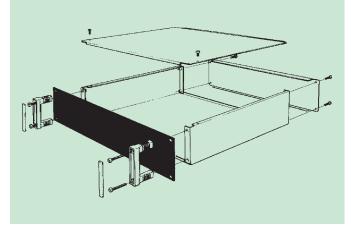
- Conforms to IEC 297-1, DIN 41494
- Simple design for total access
- Three depth variations
- Standard heights are 1U, 2U, 3U and 4U. Heights of 5U and 6U are subject to an MOQ
- Numerous configurations for total flexibility
- Choice of handle trim colours
- Components available separately (1U-4U)
- Available configured and assembled (1U-6U)
- Chassis Trays Available

Standard heights are 1U, 2U, 3U and 4U. Heights of 5U and 6U are subject to an  $\rm MOQ.$ 

#### **CONTENTS OF KIT**

Item/Description	Material/Finish
Top and base	0.9mm zintec, Painted RAL 7035 Grey
Front panels	3mm anodized aluminium (clear) or 2mm steel painted black
Rear panels	0.9mm zintec, Painted RAL 7035 Grey
Handles (1U-4U)	ABS RAL 7035 or black and clear/black painted aluminium extrusion.
Handles (5U & 6U)	9.5mm mild steel bar, polished chrome

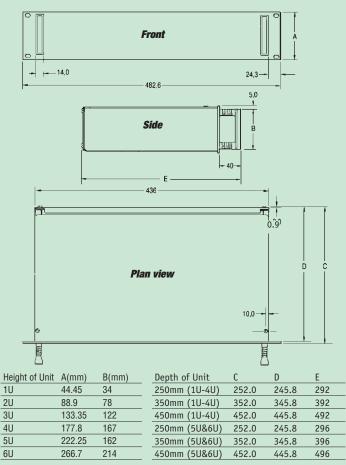
#### EXPLODED VIEW



Note the above drawings show the moulded / extruded handle as fitted to 1U-4U rackcases. 5U&6U versions are fitted with chrome bar handles (not shown)



#### DIMENSIONAL DETAIL



\*Assuming 3mm F/panel thickness

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# 19" Rack Cases

### HOW TO CONFIGURE THE RACK CASE

Since it is generally accepted that the case will consist of a top, base, front and rear, the following example illustrates how to select the configuration which best suits you.

#### THE TOP

This is available in 3 depths of 250mm, 350mm and 450mm in a ventilated and unventilated version and is simply attached to the case by means of two fasteners at the front.

#### HANDLES

For 1U, 2U, 3U and 4U versions, either black or grey plastic / extruded aluminium handles may be selected. They are supplied with a choice of green or grey highlight strips and are secured to the case using four fixing screws through the front panel fixing centres. For 5U&6U versions, heavy duty, polished chrome steel bar handles are supplied – note these are not available as a separate component part.

#### THE BASE

This is available in 3 depths of 250mm, 350mm and 450mm and six heights of 1U-6U. It is available in ventilated and unventilated versions. Note that 5U&6U bases are not available as separate component parts.

#### FRONT PANELS

These are available in clear anodised aluminium or black painted versions and are attached to the base by means of four screw fixings (eight on 4U-6U versions). There are six height variations of 1U-6U and all will accept front panel handles. Note that 5U&6U front panels are not available as a separate component parts.

#### **REAR PANELS**

These are available in RAL 7035 painted zintec and are attached to the base by 4 screw fixings. There are six height variations of 1U-6U and all are removable by four screw. Note that 5U&6U rear panels are not available as a separate component part.

#### **ORDERING INFORMATION – COMPONENT PARTS**

Top covers	250mm	350mm	450mm
Ventilated	503-232963	503-232965	503-232967
Unventilated	503-232964	503-232966	503-232968

Base 1U	250mm	350mm	450mm
Ventilated	503-232945	503-232951	503-232957
Unventilated	503-232946	503-232952	503-232958

Base 2U	<b>250</b> mm	350mm	450mm
Ventilated	503-232947	503-232953	503-232959
Unventilated	503-232948	503-232954	503-232960

Base 3U	250mm	350mm	450mm
Ventilated	503-232949	503-232955	503-232961
Unventilated	503-232950	503-232956	503-232962

Base 4U	<b>250mm</b>	350mm	450mm
Ventilated	503-4003032	503-4003034	503-4003036
Unventilated	503-4003033	503-4003035	503-4003037

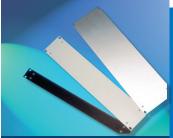
Front panels	1U	2U	3U	4U
Black painted	503-232970	503-232973	503-232976	503-4003038
Clear anodise	503-232971	503-232974	503-232977	503-4003039

Rear panels	1U	2U	<b>3U</b>	4U
RAL 7035	503-232984	503-232985	503-232986	503-4003040
painted steel	003-232904	000-202900	303-232900	505-4005040









Front panels



#### **ORDERING INFORMATION – COMPONENT PART**

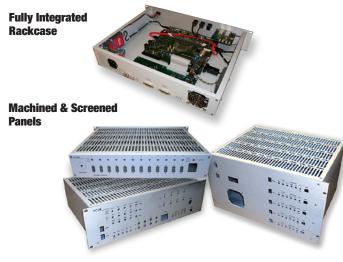
Handles	10	2U	3U	4U
Black	503-232978	503-232980	503-232982	503-4003041
Grey	503-232979	503-232981	503-232983	503-4003042

Note: Care should be taken with 1U and 2U 450mm deep versions not to excessively weight load the unit without the use of additional chassis supports.

#### **CUSTOMISING SERVICE**

1U-4U Handles

Verotec has many years experience in the design and production of custom 19" Rack cases. Most of our standard products are easily modified in order to suit a wide range of specific applications. Be it the physical size, the finish, surface printing, special machining or assembly, we're able to help and look forward to being of service.



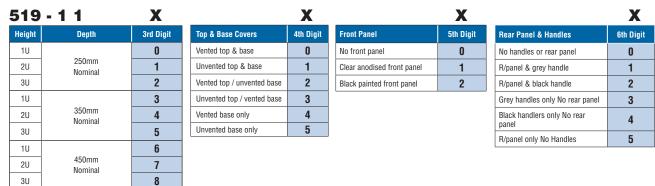
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#### **CONFIGURED RACKCASES**

So that specific permutations can be provided, the below charts should be used to configure exact requirements. Each digit of the ordercode represents an available option for example, part number 519-110113 represents a 1U rack case, 250mm deep with a plain top cover and base, clear anodised front panel and grey handles. Configured units are shipped assembled. 5U & 6U versions are subject to a 5 piece MOQ.

#### ORDERING INFORMATION - 1U, 2U & 3U RACKCASES



#### **ORDERING INFORMATION – 4U, 5U & 6U RACKCASES**

519 <sup>.</sup>	-22	Χ		Χ		X		X
Height	Depth	3rd Digit	Base & Top Cover	4th Digit	Front Panel	5th Digit	Rear Panel & Handles	6th Digit
4U		0	Vented top & base	0	No front panel	0	No handles or rear panel	0
5U	250mm Nominal	1	Unvented top & base	1	Clear anodised front panel	1	Rear panel & grey handles *	1
6U		2	Vented top / unvented base	2	Black painted front panel	2	Rear panel & black handles *	2
4U		3	Unvented top / vented base	3			Grey handles * No rear panel	3
5U	350mm Nominal	4	Vented base only	4			Black handles * No rear panel	4
6U		5	Unvented base only	5			Rear panel only. No handles	5
4U		6						
5U	450mm Nominal	7						
6U		8						

\* Note: Grey and Black handles only available on 4U Rackcase. 5U&6U versions fitted with chrome bar handles.

#### **CHASSIS TRAY**

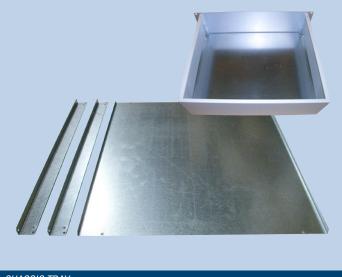
To facilitate the mounting of electro/mechanical components in to the rackcase, a chassis tray may be used. Available in three depths, the tray is formed front and back to prevent bowing and is supported either side by a chassis runner that's secured to the side of the case using screw fixings supplied. The chassis tray is conductive and non-perforated and sits 15mm above the base of the case to give adequate space for fixings.

#### **CONTENTS OF KIT**

Description	Qty	Material/Finish
Chassis Tray	1	0.9mm Zintec plated steel
Chassis Runner	2	0.9mm Zintec plated steel
Fixings		

#### **ORDERING INFORMATION**

Description	Ordercode
19" x 250mm	503-4002616
19" x 350mm	503-4002617
19" x 450mm	503-4002618



CHASSIS TRAY

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# 19" Rack Cases

#### **VEROSHIELD RACK CASE**

The Veroshield case is designed for applications that demand a high level of EMC screening and cosmetic appeal without compromising on strength and usability. The enclosure is constructed from 0.9 mm galvanised steel to maintain electrical conductivity throughout the unit; an additional 19" aluminium front panel, external to the screened enclosure, is provided to improve the appearance when the unit is mounted in a rack or desktop case. Removable top and bottom covers facilitate easy access to the internal components; they are secured with multiple fixings around their periphery to ensure that slot lengths are kept to a minimum to preserve the high levels of attenuation. The flat panel construction enables the units to be easily machined to suit the requirements of the application.

#### Features:

- Available in 1U, 2U & 3U heights
- Compatible with Diplomat 19" Cases
- High performance EMC shielding
- Robust construction
- Easy assembly / access
- Conductive finish
- Cosmetic appeal
- Handles for easy handling
- Supplied assembled

#### Applications

The development of modern electronic systems has led to increasing problems with RFI/EMI. Most of these can be overcome by good design practise at board and component level. For those systems that are especially sensitive Verotec produce the Veroshield case.

Careful design of the Veroshield components has produced an EMC 19 inch Rack Case design, which offers a level of radio frequency interference screening, whilst remaining affordable and providing a high degree of adaptability to suit a wide range of differing applica-tions.

#### **Material and Finish**

Description	Material / finish
Top, Base, Inner Front & rear panel	: 0.9mm Galvanised Steel
Front Panel	: 3mm Clear Anodised Aluminium
Handles	: Black ABS with light grey infill strip
Extrusion	: Black painted

#### **Ordering Information**

Description	Ordercode
1U x 19" x 265mm	503-4002203
2U x 19" x 365mm	503-4002204
3U x 19" x 365mm	503-4002205

#### **CUSTOMISING SERVICE**

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#### **CUSTOM VEROSHIELD** CASE





## VEROSHIELD

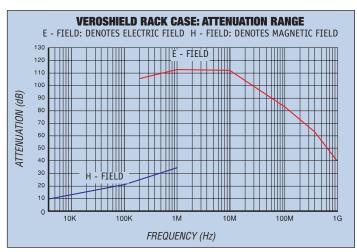


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Rack Cases



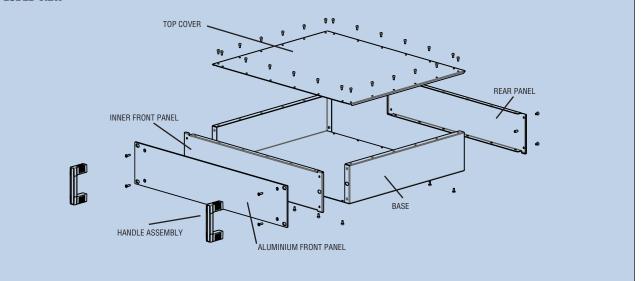


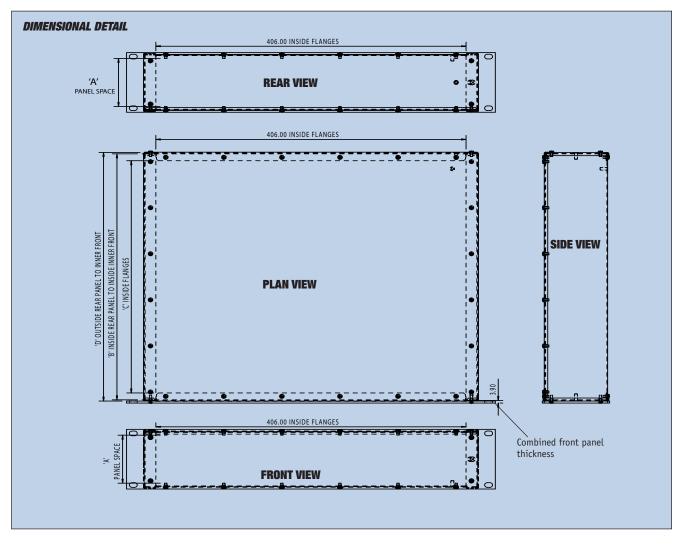
Typical attenuation figures are in excess of 110 dB up to 10 MHz, falling linearly to 40 dB at 1 GHz.

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#### **EXPLODED VIEW**





SIZE	Order Code	Dim A	Dim B	Dim C	Dim D
1U x 19" x 265mm	503-4002203	26.47	263.2	242.8	266.8
2U x 19" x 365mm	503-4002204	70.92	363.2	342.8	366.8
3U x 19" x 365mm	503-4002205	115.37	363.2	342.8	366.8

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