

# VEROTEC

Electronics Packaging



**VEROTEC Cases**

## CUSTOM VEROTEC CASES

TecServ+ is the vehicle by which Verotec delivers its value added services. These fall within 5 main categories and are described below. When it comes to Verotec Cases, we've worked with many customers in the past to design, manufacture and help bring to market modified and custom versions of our standard products – a small selection of these are pictured below. If you have any special Verotec Case requirements, please contact our sales office.



## ENGINEERING SERVICES:

- + Complete review of commercial, electro-mechanical, environmental and regulatory product requirements with customer.
- + Import of STEP, IGES, DWG & DXF file formats
- + Mechanical and electrical design using latest CAD software
- + 3D Modelling to allow conceptual testing before production
- + Component selection from a vast library of parts

## MANUFACTURING SERVICES:

- + Prototype / pre-production samples using small batch shop
- + Modification of standard catalogue products (including machining, CNC punching, laser cutting, painting & silk-screening)
- + Manufacture of custom / bespoke products (including fabrication, machining, CNC punching, plating, painting & silk-screening)
- + Assembly & kitting of components
- + Integration & mechanical / electrical testing of complex systems

## COMPLIANCE SERVICES:

- + Validation of product design and/or specification
- + Advice on environment legislation (RoHS, Reach, Weee etc.)
- + In-house pre-compliance testing for CE marking (Safety, EMC)
- + Supply of product technical construction file
- + Testing & certification of a product at an approved test house (for EMC, shock & vibration, altitude, temperature, humidity etc.)

## LOGISTICAL SERVICES:

- + Express manufacturing service for quick turnaround of urgent orders
- + Special / bespoke packaging for safe transport of goods
- + Scheduled orders (including JIT and KAN BAN systems)
- + Stock holding & distribution
- + Exporting (including export packaging, land/sea/air transportation, freight forwarding, customs documentation & shipping manifests)

## PROJECT MANAGEMENT SERVICES:

- + Initial project consultation
- + Capability and feasibility study
- + Estimation of project cost and leadtime
- + Management of design process (specification to validation)
- + Management of manufacturing process (prototype to production)
- + Cost reduction programmes throughout product life cycle



Custom 3U x 19inch Verotec Case with IP sealed front door – telecoms application.



Customised 1U x 10.5 Verotec Case with modified front and rear panel - instrumentation application.





# Verotec Case - Introduction

## INTRODUCTION

Verotec Cases offer an excellent combination of technical competence and aesthetic design. This makes them an ideal packaging solution for high-end electronic instruments. The Verotec Case design provides an "upgrade" path from the basic case to provide a high-EMC or IP 55 performance enclosure that meets the many current environmental requirements.

The Verotec Case has been designed with discretely hidden fixing screws under clip in mouldings. This means not only is your product more secure, from casual interference, it is also in a visually clean enclosure.

Verotec Cases are available in 1U, 2U, 3U and 6U heights in both 10.5" and 19" widths, with optional ventilation and in 260, 300, 400 & 500 mm depths. There are also two colour schemes Light Grey RAL 7035 single colour and light grey RAL 7035 / anthracite RAL 7016 Two tone. There is a Caseframe version which uses the KM6- 2 subrack system for mounting Eurocards and a variety of accessories including trims, handles, front & rear panels, chassis supports & trays

## FEATURES

- Attractive clean design with hidden fixings (if required)
- 19 inch equipment practise compatible
- 4 heights, 2 widths and 4 depth options
- Light Grey and Two Tone Anthracite/Light Grey colour options
- Front Cover trims with optional handle extrusion
- Carry handle option for half width 10.5" and full with 19" units
- Optional upgrades for EMC protection and IP 55 environmental sealing
- Range of accessories
- Transparent hinged door available to order on TecServ+
- Caseframe version using KM6-2 Subrack and accessories
- Supplied assembled

## ORDERING

Verotec Cases & Caseframe should be ordered as the basic case which will be supplied in a carton and assembled. Selection criteria for cases are size, colour and ventilation and for Caseframes size and colour.

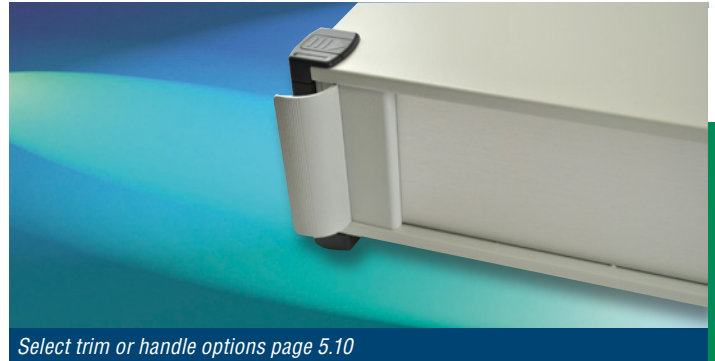
Accessories exclusively for Verotec cases & Caseframes are in the following pages of this section of the handbook. They can be found in the pages shown in the index.

19inch panels and KM6-2 accessories are found in the relevant section handbook These are listed in the Accessory index on page 5.14

| Index                                      | Page |
|--|------|
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| Introduction                               | 5.03 |
| Technical specification                    | 5.04 |
| Overview                                   | 5.05 |
| Verotec Case – Full Width (19inch)         | 5.06 |
| Verotec Case – Half Width (10.5 inch)      | 5.07 |
| Verotec Caseframe – Full Width (19inch)    | 5.08 |
| Verotec Caseframe – Half Width (10.5 inch) | 5.09 |
| Trims, Cover Trims & Handles               | 5.10 |
| Front & Rear Panels                        | 5.11 |
| EMC/IP Front & Rear Panels                 | 5.12 |
| EMC/IP Seal Kits                           | 5.12 |
| Chassis Tray Support Kits                  | 5.13 |
| Chassis Tray Kits                          | 5.13 |
| Carry Handles                              | 5.13 |
| Hinged Transparent Doors (TecServ+)        | 5.14 |
| Accessory Index                            | 5.14 |



Select a Case or Caseframe pages 5.06-5.09



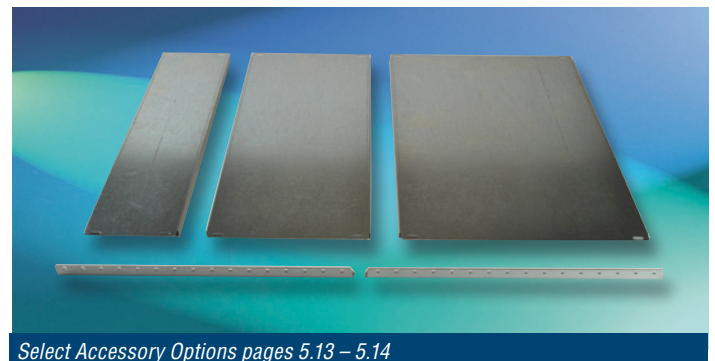
Select trim or handle options page 5.10



Select Front & Rear Panel options page 5.11



Select EMC & IP Options page 5.12



Select Accessory Options pages 5.13 – 5.14

## MATERIAL SPECIFICATION

|                       |  |
|-----------------------|--|
| Covers & Side Panels: | 0.9mm Galvanised Steel Sheet                           |
| Corner Extrusions:    | Aluminium Alloy  |
| Fixings:              | M4 x 16 Csk Head; M4 x 6 Cheese Head                   |
| Mouldings:            | ABS UL94-V0 Light Grey RAL 7035 or Anthracite RAL 7016 |

## THERMAL MANAGEMENT

Verotec Cases have the option to be supplied with ventilation holes in the base. This allows cool air to be pulled into the case, by convection. Where a rear panel is fitted similar ventilation holes are punched in the rear with the intention of promoting a “through flow” of cool air through the equipment. In both the base panel and the rear panel the matrix of holes has been design such that in minimises the degradation of the EMC/RFI performance of the case.

In cases of high thermal load Verotec can offer to supply Verotec cases with fans and/or fan apertures on the rear panel supplied as part of the Tecserv+ service

## EMC PROTECTION

Verotec Cases have been designed with inherent EMC/RFI protection. Fitted with optional EMC/IP Front and Rear Panels and conductive finger strips the cases will provide a high level of attenuation across a broad frequency range. EMC/IP Front and rear panels are available as optional accessories along with a gasket kit for the Verotec Case

## IP PROTECTION

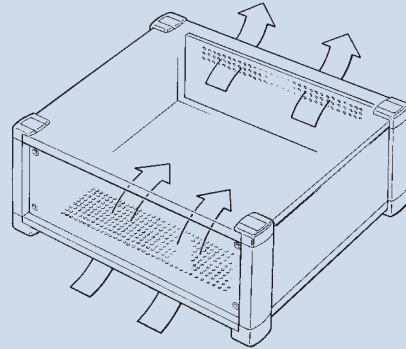
In order to meet a wider range of applications the Verotec Case is also able to be upgraded to meet IP 54. Fitted with optional EMC/IP Front and Rear panels and IP seals the cases will protect internal equipment from ingress of moisture and dust. The Verotec case is protected in most industrial environments. EMC/IP Front and Rear panels along with Gasket kits are available as options in order to upgrade the basic Verotec case to meet this standard.

## PAINT FINISH

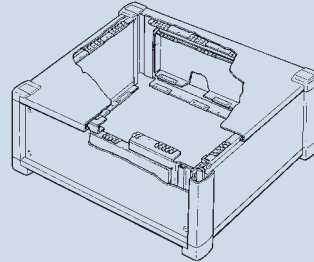
The steel panels of the Verotec case are painted using epoxy fine texture powder. Where painted the colour is Light Grey RAL 7035 in both the single colour and Two tone case versions For the two tone case version the aluminium corner extrusions are painted with powder epoxy fine texture in Anthracite RAL 7016



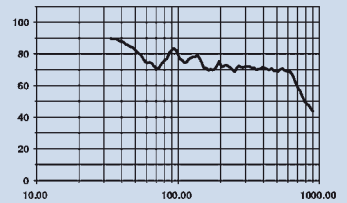
## AIRFLOW



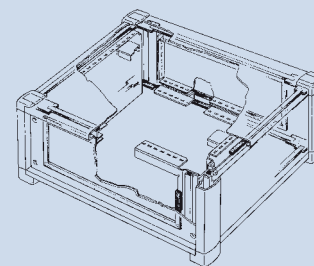
## FINGER POSITIONS & CONTACT POINTS



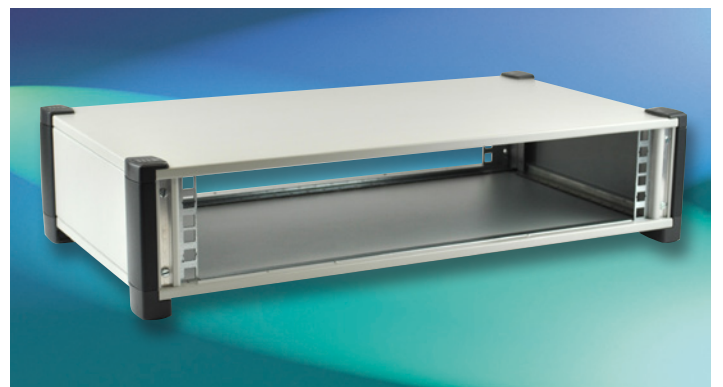
## SHIELDING EFFECTIVENESS 50% BecU COVERAGE-E FIELD



## GASKET POSITIONS



| IP | INDEX OF PROTECTION   |
|----|---|
| 5  | Machine protected against dust and accidental contact.<br>Test result : no dust enters in harmful quantities, no risk of direct contact with rotating parts. The test lasts 2 hours (test result : no talc enters which could adversely affect the running of the motor). |
| 5  | Machine protected against jets of water from all directions from hoses at 3 m distance with a flow rate of 12.5l / min at 0.3 bar.<br>The test lasts 3 minutes (test result : no damage from water projected onto the machine).   |



**Verotec Cases** offer an excellent combination of technical competence and aesthetic design. Equipment can be housed in a standard full width (19inch) or half width (10.5 inch) enveloped either 1U & 2U high and up to 300mm deep. The Verotec case is ideally suited to desktop or workbench mounting. With the extruded corners, cover mouldings and tilt feet it is readily stacked for multi instrument applications. The tilt feet provide an excellent facility for viewing front panel displays and can be easily raised or lowered as required.

The Verotec case range is available in both full width, 19inch and half width 10.5 inch sizes to offer the widest range of instrument applications. Ventilation is provided by a matrix of holes in the base which when a rear panel is added provide a through flow of cool air. To enhance its visual appeal the case is offered in two colour options. Either as single colour Light grey RAL 7025 or Two Tone Light Grey RAL 7035 and Anthracite RAL 7016.

### FEATURES

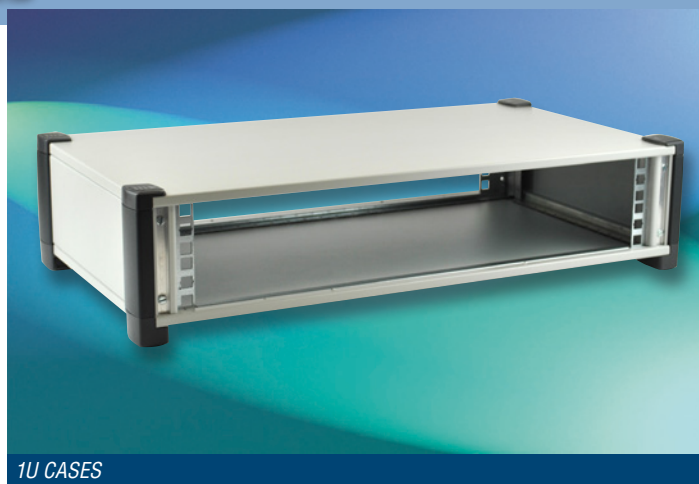
- Heights: 1U & 2U
- Widths: Full Width 19 inch & Half Width 10.5 Inch
- Depths: 260mm & 300mm
- Optional Vented base panel
- Optional Single colour Light Grey or Two Tone Light Grey & Anthracite
- Powder painted in textured finish for high scratch resistance
- Tilt foot fitted to front foot moulding
- Hidden fixings under clip in mouldings
- Upgrades for EMC and Environmental protection

### CONTENTS OF CASE

|   |                                    |
|---|------------------------------------|
| 1 | Top Cover                          |
| 1 | Bottom Cover (Vented/Non Vented)   |
| 2 | Side Panels                        |
| 4 | Corner extrusions (internal)       |
| 4 | Corner extrusions (external)       |
| 2 | Front & Rear Frame                 |
| 4 | Foot Moulding                      |
| 2 | Tilt Foot Moulding                 |
| 4 | Cover Moulding with clip in covers |
| 1 | Set of fixings                     |

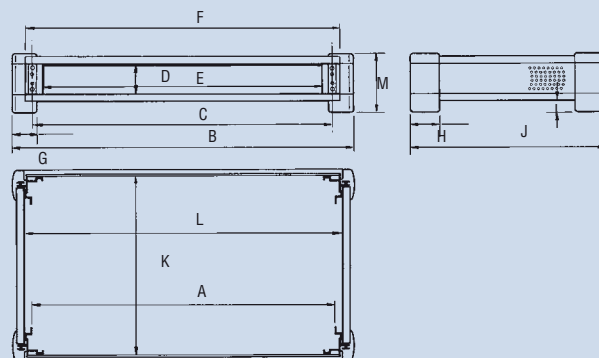
### ORDERING INFORMATION

| Height | Width | Depth | Colour     | Vented     | Unvented   |
|--------|-------|-------|------------|------------|------------|
| 1U     | 10.5  | 260   | Two Tone   | 70-4003608 | 70-4003974 |
| 1U     | 10.5  | 260   | Light Grey | 70-4003962 | 70-4003980 |
| 1U     | 19    | 300   | Two Tone   | 70-4003609 | 70-4003975 |
| 1U     | 19    | 300   | Light Grey | 70-4003963 | 70-4003981 |
| 2U     | 10.5  | 260   | Two Tone   | 70-4003610 | 70-4003976 |
| 2U     | 10.5  | 260   | Light Grey | 70-4003964 | 70-4003982 |
| 2U     | 19    | 300   | Two Tone   | 70-4003611 | 70-4003977 |
| 2U     | 19    | 300   | Light Grey | 70-4003965 | 70-4003983 |

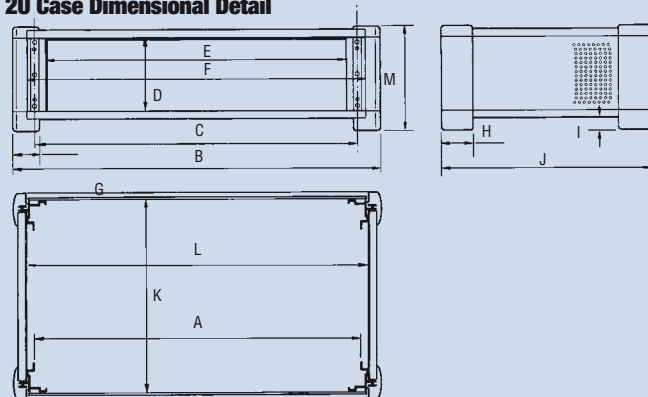


1U CASES

### 1U Case Dimensional Detail



### 2U Case Dimensional Detail





# Verotec Case: 3U & 6U Cases

**Verotec Cases** offer an excellent combination of technical competence and aesthetic design. Equipment can be housed in a standard full width (19inch) or half width (10.5 inch) enveloped either 3U or 6U high and up to 500mm deep. The Verotec case is ideally suited to desktop or workbench mounting. With the extruded corners, cover mouldings and tilt feet it is readily stacked for multi instrument applications. The tilt feet provide an excellent facility for viewing front panel displays and can be easily raised or lowered as required.

The Verotec case range is available in both full width, 19inch and half width 10.5 inch sizes to offer the widest range of instrument applications. Ventilation is provided by a matrix of holes in the base which when a rear panel is added provide a through flow of cool air. To enhance its visual appeal the case is offered in two colour options. Either as single colour Light grey RAL 7025 or Two Tone Light Grey RAL 7035 and Anthracite RAL 7016.

## FEATURES

- Heights: 3U & 6U
- Widths: Full Width 19 inch & Half Width 10.5 Inch
- Depths: 300mm, 400mm & 500mm
- Optional Vented base panel
- Optional Single colour Light Grey or Two Tone Light Grey & Anthracite
- Powder painted in textured finish for high scratch resistance
- Tilt foot fitted to front foot moulding
- Hidden fixings under clip in mouldings
- Upgrades for EMC and Environmental protection

## CONTENTS OF CASE

|   |                                    |
|---|------------------------------------|
| 1 | Top Cover                          |
| 1 | Bottom Cover (Vented/Non Vented)   |
| 2 | Side Panels                        |
| 4 | Corner extrusions (internal)       |
| 4 | Corner extrusions (external)       |
| 2 | Front & Rear Frame                 |
| 4 | Foot Moulding                      |
| 2 | Tilt Foot Moulding                 |
| 4 | Cover Moulding with clip in covers |
| 1 | Set of fixings                     |

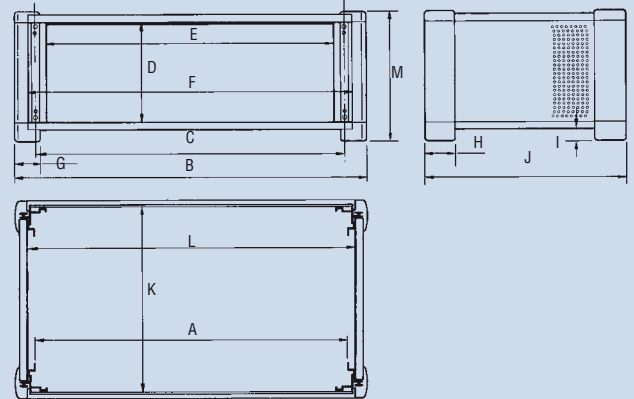
## ORDERING INFORMATION

| Height | Width | Depth | Colour     | Vented     | Unvented   |
|--------|-------|-------|------------|------------|------------|
| 3U     | 10.5  | 300   | Two Tone   | 70-4003612 | 70-4003978 |
| 3U     | 10.5  | 300   | Light Grey | 70-4003966 | 70-4003984 |
| 3U     | 19    | 400   | Two Tone   | 70-4003613 | 70-4003979 |
| 3U     | 19    | 400   | Light Grey | 70-4003967 | 70-4003985 |
| 6U     | 10.5  | 400   | Two Tone   | 70-4004343 | 70-4004527 |
| 6U     | 10.5  | 400   | Light Grey | 70-4004352 | 70-4004528 |
| 6U     | 19    | 500   | Two Tone   | 70-4004348 | 70-4004529 |
| 6U     | 19    | 500   | Light Grey | 70-4004357 | 70-4004530 |



3U CASES

## 3U Case/Caseframe Dimensional Detail



## 6U Case/Caseframe Dimensional Detail

# Verotec Case: 3U Caseframes 42 & 84 hp

**Verotec Caseframes** offer an excellent combination of technical competence and aesthetic design. Eurocards can be housed in a standard 84 hp or 42 hp width either 3U or 6U high and up to 500mm deep. The Verotec caseframe is ideally suited to desktop or workbench mounting. With the extruded corners, cover mouldings and tilt feet it is readily stacked for multi instrument applications. The tilt feet provide an excellent facility for viewing front panel displays and can be easily raised or lowered as required. The Verotec caseframe range is available in two widths 42 and 84 hp, two heights 3U & 6U and 300,400 & 500 mm depths offering the widest range of applications. Ventilation is provided by a matrix of holes in the base which when a rear panel is added provide a through flow of cool air. To enhance its visual appeal the case is offered in two colour options. Either as single colour Light grey RAL 7025 or Two Tone Light Grey RAL 7035 and Anthracite RAL 7016.

## FEATURES

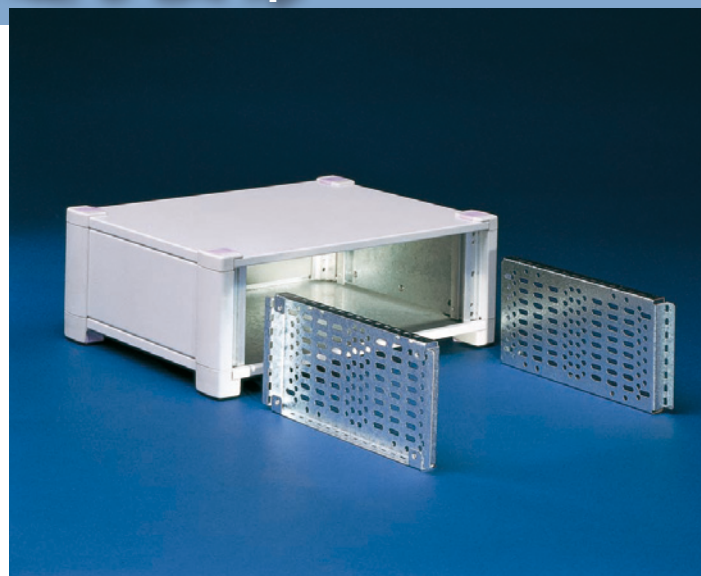
- Heights: 3U & 6U Widths: Full Width 19 inch & Half Width 10.5 Inch
- Depths: 300mm, 400mm & 500mm
- Vented base panel
- Optional Single colour Light Grey or Two Tone Light Grey & Anthracite
- Powder painted in textured finish for high scratch resistance
- Tilt foot fitted to front foot moulding
- Hidden fixings under clip in mouldings
- Upgrades for EMC and Environmental protection
- Subrack components based upon the industry standard KM6-II system

## CONTENTS OF CASE

|   |                                    |
|---|------------------------------------|
| 1 | Top Cover                          |
| 1 | Bottom Cover (Vented/Non Vented)   |
| 2 | Side Panels                        |
| 4 | Corner extrusions (internal)       |
| 4 | Corner extrusions (external)       |
| 2 | Front & Rear Frame                 |
| 4 | Foot Moulding                      |
| 2 | Tilt Foot Moulding                 |
| 4 | Cover Moulding with clip in covers |
| 1 | Set of fixings                     |

## ORDERING INFORMATION

| Height | Width (hp) | Depth | Colour     | Vented            | E/Plate Depth |
|--------|------------|-------|------------|-------------------|---------------|
| 3U     | 42         | 300   | Two Tone   | <b>70-4004531</b> | 240           |
| 3U     | 42         | 300   | Light Grey | <b>70-4004532</b> | 240           |
| 3U     | 84         | 300   | Two Tone   | <b>70-4004533</b> | 240           |
| 3U     | 84         | 300   | Light Grey | <b>70-4004534</b> | 240           |
| 3U     | 42         | 400   | Two Tone   | <b>70-4004535</b> | 360           |
| 3U     | 42         | 400   | Light Grey | <b>70-4004536</b> | 360           |
| 3U     | 84         | 400   | Two Tone   | <b>70-4004537</b> | 360           |
| 3U     | 84         | 400   | Light Grey | <b>70-4004538</b> | 360           |



# Verotec Case: 6U Caseframes 42 & 84 hp

**Verotec Caseframes** offer an excellent combination of technical competence and aesthetic design. Eurocards can be housed in a standard 84 hp or 42 hp width either 3U or 6U high and up to 500mm deep. The Verotec caseframe is ideally suited to desktop or workbench mounting. With the extruded corners, cover mouldings and tilt feet it is readily stacked for multi instrument applications. The tilt feet provide an excellent facility for viewing front panel displays and can be easily raised or lowered as required. The Verotec caseframe range is available in two widths 42 and 84 hp, two heights 3U & 6U and 300,400 & 500 mm depths offering the widest range of applications. Ventilation is provided by a matrix of holes in the base which when a rear panel is added provide a through flow of cool air. To enhance its visual appeal the case is offered in two colour options. Either as single colour

## FEATURES

- Heights: 6U Widths: Full Width 19 inch & Half Width 10.5 Inch
- Depths: 400mm & 500mm
- Vented base panel
- Optional Single colour Light Grey or Two Tone Light Grey & Anthracite
- Powder painted in textured finish for high scratch resistance
- Tilt foot fitted to front foot moulding
- Hidden fixings under clip in mouldings
- Upgrades for EMC and Environmental protection
- Subrack components based upon the industry standard KM6-II system

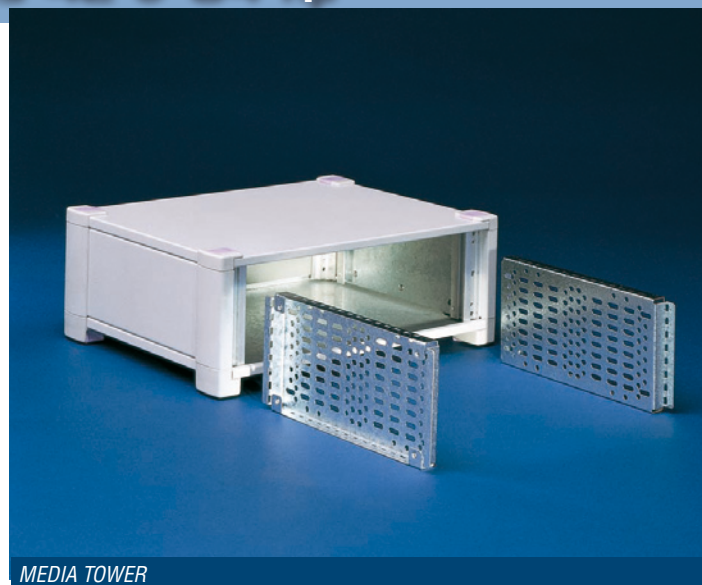
## CONTENTS OF CASE

|   |                                    |
|---|------------------------------------|
| 1 | Top Cover                          |
| 1 | Bottom Cover (Vented/Non Vented)   |
| 2 | Side Panels                        |
| 4 | Corner extrusions (internal)       |
| 4 | Corner extrusions (external)       |
| 2 | Front & Rear Frame                 |
| 4 | Foot Moulding                      |
| 2 | Tilt Foot Moulding                 |
| 4 | Cover Moulding with clip in covers |
| 1 | Set of fixings                     |

Light grey RAL 7025 or Two Tone Light Grey RAL 7035 and Anthracite RAL 7016.

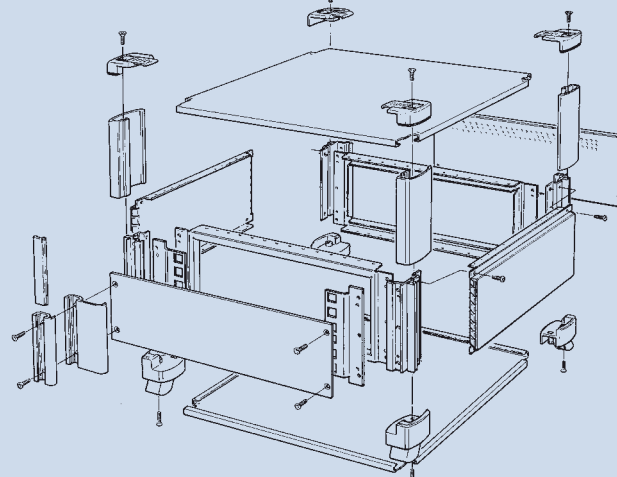
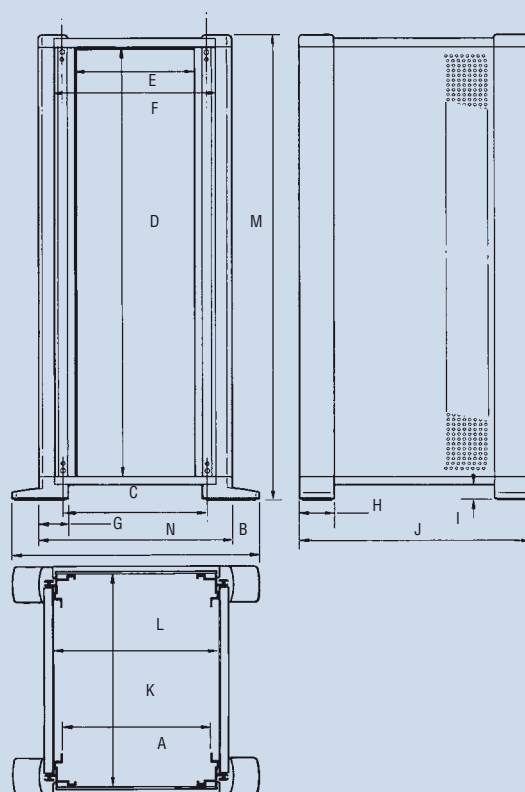
## ORDERING INFORMATION

| Height | Width (hp) | Depth | Colour     | Vented            | E/Plate Depth |
|--------|------------|-------|------------|-------------------|---------------|
| 6U     | 42         | 400   | Two Tone   | <b>70-4004539</b> | 360           |
| 6U     | 42         | 400   | Light Grey | <b>70-4004540</b> | 360           |
| 6U     | 84         | 400   | Two Tone   | <b>70-4004541</b> | 360           |
| 6U     | 84         | 400   | Light Grey | <b>70-4004542</b> | 360           |
| 6U     | 42         | 500   | Two Tone   | <b>70-4004543</b> | 420           |
| 6U     | 42         | 500   | Light Grey | <b>70-4004544</b> | 420           |
| 6U     | 84         | 500   | Two Tone   | <b>70-4004545</b> | 420           |
| 6U     | 84         | 500   | Light Grey | <b>70-4004546</b> | 420           |



MEDIA TOWER

## DIMENSIONS



| Size  | Width | A      | B      | C      | D      | E      | F      | G  | H  | I  | J   | K      | L      | M      | N      |
|-------|-------|--------|--------|--------|--------|--------|--------|----|----|----|-----|--------|--------|--------|--------|
| Media | 10.5" | 177.10 | 290.10 | 173.60 | 268.80 | 146.66 | 190.12 | 30 | 40 | 16 | 400 | 381.60 | 192.02 | 305.80 | 221.10 |
| Media | 19"   | 177.10 | 290.10 | 173.60 | 483.70 | 146.66 | 190.12 | 30 | 40 | 16 | 400 | 381.60 | 192.02 | 521.80 | 221.10 |



# Verotec Case: Handles & Trims

**Verotec Cases** offer 5 front trim options depending upon the application they are being used for:

**Option 1** – No front trims – this would be used when a Verotec plain front panel is used in Verotec case. In this application the front panel fixings are visible, but this option offers the ability to be able to quickly remove the front panel without removing the top cover of the case.

**Option 2** – Front Cover Trims – These can be fitted with or without a Verotec front panel and would cover the panel fixings. The covers are made up of two extrusions which slide together and require the top cover of the case to be removed adding to security. When used with a 19inch front panel the 19 inch panel fixings remain visible for simple removal of the front panel.

## FRONT COVER TRIMS ORDERING INFORMATION

| height | Order Code |
|--------|------------|
| 1U     | 70-132501  |
| 2U     | 70-132502  |
| 3U     | 70-132503  |
| 4U     | 70-4004315 |

**Option 3** – Front Cover Trims with handles – These trims offer the same features and benefits of the cover trims but with the infill trim being replaced by a handle infill. This gives the added benefit of being able easily lift the case front the front and offers protection to front mounted components.

## FRONT HANDLE TRIMS ORDERING INFORMATION

| height | Order Code |
|--------|------------|
| 1U     | 70-4004024 |
| 2U     | 70-4004025 |
| 3U     | 70-4004026 |
| 4U     | 70-4004312 |

**Option 4** – Front 19 inch Cover Trims – these offer a secure solution for 19inch front panels fitted to Verotec cases. With this option the M6 fixings are covered offering a degree of security to the assembled instrument. In order to assemble the case with these trims the top cover need to be removed

## FRONT 19" COVER TRIMS ORDERING INFORMATION

| height | Order Code |
|--------|------------|
| 1U     | 70-132401  |
| 2U     | 70-132402  |
| 3U     | 70-132403  |
| 4U     | 70-4004317 |

**Option 5** – Front 19 inch Cover trims with Handles – offering the same features as the Front 19 inch Cover Trims this option also offers the benefit being able to lift the instrument from the front and provides protection to front panel mounted components.

## FRONT 19" COVER HANDLE TRIMS ORDERING INFORMATION

| height | Order Code |
|--------|------------|
| 1U     | 70-4004027 |
| 2U     | 70-4004028 |
| 3U     | 70-4004029 |
| 4U     | 70-4004313 |

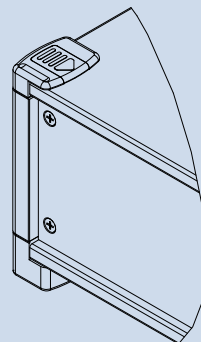
## CONTENTS OF KITS:

|                          |      |
|--------------------------|------|
| Cover Trims -            | 2off |
| Infill / Handle Infill - | 2off |
| Fixings                  |      |

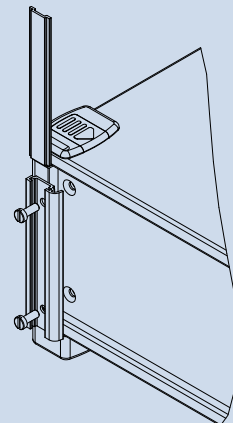
## MATERIAL SPECIFICATION:

|                     |                                  |
|---------------------|----------------------------------|
| Handles and Trims – | Extruded Aluminium alloy         |
| Finish –            | Powder Paint RAL 7035 Light Grey |

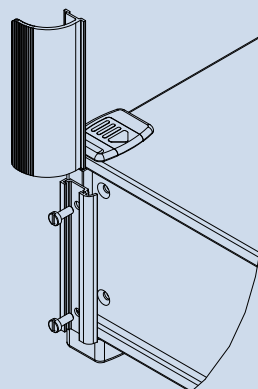
OPTION 1



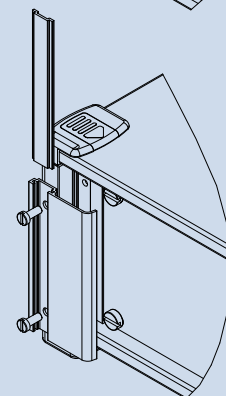
OPTION 2



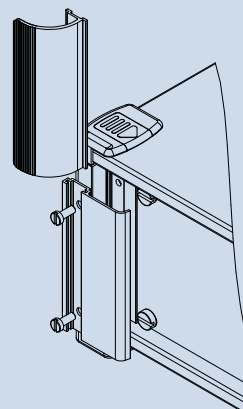
OPTION 3



OPTION 4



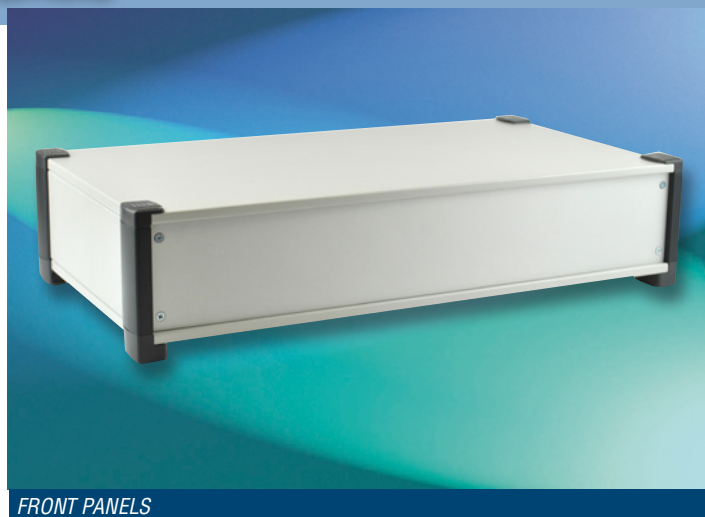
OPTION 5



# Verotec Case: Front & Rear Panels

**Verotec Case:** has its own range of dedicated front and rear panels. Most cases will require a rear panel, which can be either ventilated or not. Aluminium front panels are available and allow the fitment of optional trims and handles to the front of the case.

**Front Panels** for the Verotec case are supplied in anodised aluminium and are designed to provide an aesthetic front finish for the case. The front panels are manufactured from 2.5mm thick aluminium sheet which is readily modified to accept switches, displays and other front panel mounting components. The front panel fixes to the vertical extrusions in the front corners of the case. The visual appearance of the panel can be enhanced by optionally fitting trims or handle trims over the front panel. As well as improving the appearance this also enhances the security of the case by covering the front panel fixing screws. Similar to the front of the case the rear can also be fitted with a rear panel and trims which as well as enhancing the visual appearance also improve the security of the unit by hiding the panel fixings.



FRONT PANELS

## CONTENTS OF FRONT PANEL KITS

|   |                       |
|---|-----------------------|
| 1 | Aluminium Front Panel |
| 4 | fixing screws         |

## FRONT PANEL KIT ORDERING INFORMATION

| Height | Width | Order Code |
|--------|-------|------------|
| 1U     | 10.5  | 70-258409  |
| 1U     | 19    | 70-258410  |
| 2U     | 10.5  | 70-258411  |
| 2U     | 19    | 70-258412  |
| 3U     | 10.5  | 70-258413  |
| 3U     | 19    | 70-258414  |
| 6U     | 10.5  | 70-4004555 |
| 6U     | 19    | 70-4004556 |

Rear Panels are supplied in 0.9mm zintec steel which is then painted in Light grey fine texture epoxy powder. There is the option to fit either a standard or ventilated rear panel. The ventilated rear panel version, whilst effective on its own, will serve to enhance the through flow of air in the Verotec case when used in conjunction with the ventilated version of the Verotec case.

## CONTENTS OF KIT

|   |               |
|---|---------------|
| 1 | Rear Panel    |
| 4 | Fixing Screws |

## REAR PANELS ORDERING INFORMATION

| Height | Width | Order Code Vented | Order Code Unvented |
|--------|-------|-------------------|---------------------|
| 1U     | 10.5  | 70-4003993        | 70-4004000          |
| 1U     | 19    | 70-4003994        | 70-4004001          |
| 2U     | 10.5  | 70-4003995        | 70-4004002          |
| 2U     | 19    | 70-4003996        | 70-4004003          |
| 3U     | 10.5  | 70-4003997        | 70-4004004          |
| 3U     | 19    | 70-4003998        | 70-4004005          |
| 6U     | 10.5  | 70-4004994        | 70-4004358          |
| 6U     | 19    | 70-4003995        | 70-4004359          |

## MATERIAL SPECIFICATION:

|             |   |
|-------------|---|
| Front Panel | 2.5mm 5251 Aluminium, anodised finish                             |
| Rear Panel  | 0.9mm Zintec Steel, light grey RAL 7035 epoxy powder fine texture |

| PANEL    | Dim A  | Dim B | Dim C |
|----------|--------|-------|-------|
| 1U 10.5" | 96.35  | 118.5 | 18.5  |
| 1U 19"   | 104.35 | 318.5 | 18.5  |
| 2U 10.5" | 76.35  | 158.5 | 38.5  |
| 2U 19"   | 104.35 | 318.5 | 38.5  |
| 3U 10.5" | 76.35  | 158.5 | 58.5  |
| 3U 19"   | 104.35 | 318.5 | 58.5  |
| 6U 10.5" | 76.35  | 158.5 | 98.5  |
| 6U 19"   | 104.35 | 318.5 | 98.5  |

**Vented Area of Rear Panel Dimensional Table**

# Verotec Case: EMC/IP Front & Rear Panels, Sealing Kits

**Verotec Case:** has the ability to upgrade with EMC and IP sealing and is one of the unique features of the Verotec Case range.

By fitting an EMC/IP panel to the front and rear of a Verotec Case it is then possible to add a combination of EMC seals or IP gaskets to provide up to 40dB attenuation at 1 GHz or an environmental seal to IP54.

With the Verotec case it is also possible to fit both types of seal together. This means that a Verotec case can provide both EMC and Environmental sealing for the same application of an instrument case.

EMC/IP Front & Rear panels are required in order to upgrade a Verotec case with EMC and Environmental seals. The panels are made up of two parts. The outer panel, which is 3mm aluminium, creates a decorative finish which is anodised. The inner panel, which is 0.9mm galvanised steel is conductive and corrosion resistant. The inner panel provides the flanges to fix the EMC or IP seals allowing them to mate with the front and rear frames of the Verotec case.

## EMC/IP FRONT & REAR PANELS ORDERING INFORMATION

| Height | Width | Order Code |
|--------|-------|------------|
| 1U     | 10.5  | 70-4004185 |
| 1U     | 19    | 70-4004186 |
| 2U     | 10.5  | 70-4004187 |
| 2U     | 19    | 70-4004188 |
| 3U     | 10.5  | 70-4004189 |
| 3U     | 19    | 70-4004190 |
| 6U     | 10.5  | 70-4004280 |
| 6U     | 19    | 70-4004281 |

### CONTENTS OF KITS:

|   |               |
|---|---------------|
| 1 | EMC/IP Panel  |
| 4 | Fixing Screws |

### MATERIAL SPECIFICATION:

|             |  |
|-------------|--|
| Outer Panel | 3mm Aluminium Alloy with anodised finish |
| Inner Panel | 0.9mm galvanised sheet steel             |

EMC & IP Seal Kits are required to complete the EMC and Environmental sealing of a Verotec case. EMC kits contain all the seals need to fit into a case to enhance its screening performance. EMC kits are configured dependent upon the size of case IP gasket kits are available in two sizes one for cases of 1U & 2U and one for cases of 3U & 6U. In all cases the Verotec case will need to be disassembled to fit the seal kit and for all sizes it is possible to fit both the EMC and Environmental into the same case if so required.

## EMC & IP SEAL KITS ORDERING INFORMATION

| Height | Width | EMC Seals  | IP Seals   |
|--------|-------|------------|------------|
| 1U     | 10.5  | 70-4004041 | 70-4004047 |
| 1U     | 19    | 70-4004042 | 70-4004047 |
| 2U     | 10.5  | 70-4004043 | 70-4004047 |
| 2U     | 19    | 70-4004044 | 70-4004047 |
| 3U     | 10.5  | 70-4004045 | 70-4004048 |
| 3U     | 19    | 70-4004046 | 70-4004048 |
| 6U     | 10.5  | 70-4004559 | 70-4004048 |
| 6U     | 19    | 70-4004560 | 70-4004048 |

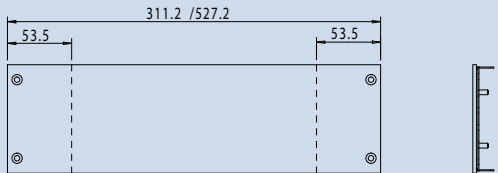
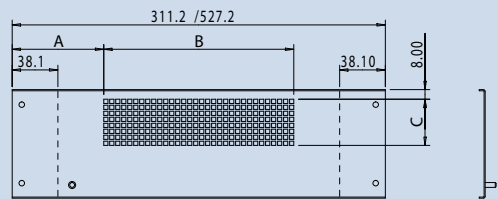
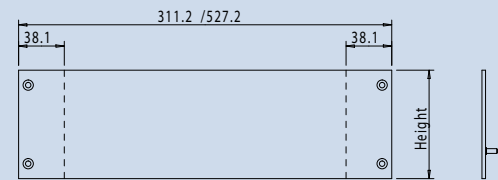
### CONTENTS OF KITS:

|                 |                                |
|-----------------|--------------------------------|
| EMC Seal Kits – | 1 set of contact strips        |
| IP Seal Kits –  | 1 set of self-adhesive gaskets |

### MATERIAL SPECIFICATION:

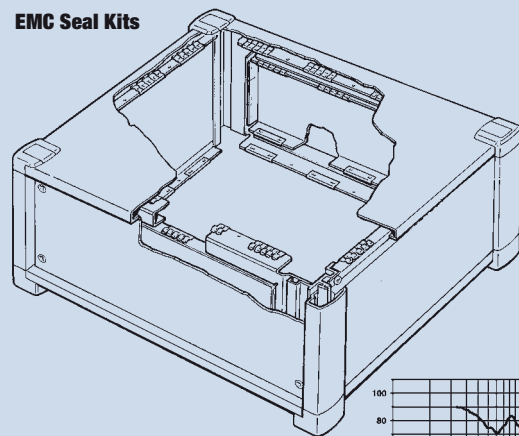
|                |                                |
|----------------|--------------------------------|
| EMC Seal Kit – | Beryllium Copper fingers       |
| IP Seal Kits – | Self-adhesive PVC foam gaskets |

## EMC/IP Front & Rear Panels

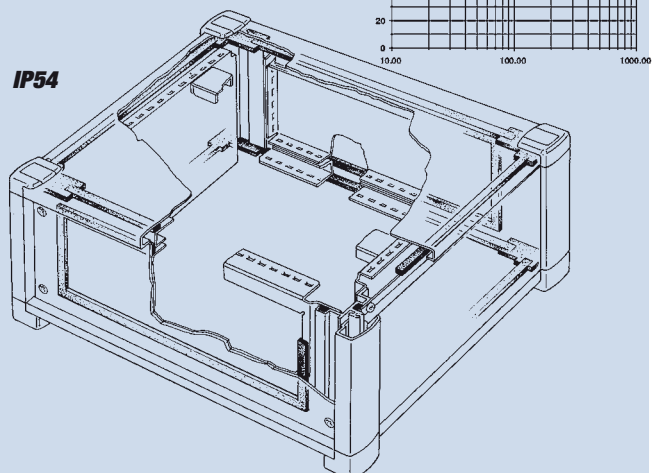


| PANEL    | Dim A  | Dim B | Dim C |
|----------|--------|-------|-------|
| 1U 10.5" | 96.35  | 118.5 | 18.5  |
| 1U 19"   | 104.35 | 318.5 | 18.5  |
| 2U 10.5" | 76.35  | 158.5 | 38.5  |
| 2U 19"   | 104.35 | 318.5 | 38.5  |
| 3U 10.5" | 76.35  | 158.5 | 58.5  |
| 3U 19"   | 104.35 | 318.5 | 58.5  |
| 6U 10.5" | 76.35  | 158.5 | 98.5  |
| 6U 19"   | 104.35 | 318.5 | 98.5  |

## EMC Seal Kits



## IP Seal Kits





## CHASSIS TRAYS AND SUPPORT KITS

These are sold as separate items to give the maximum flexibility when creating an internal tray within a Verotec case. Chassis tray supports are available in 4 depths each to suit the overall depth of the case they are fitted to.

Chassis trays are available in a range of depths and two widths 19inch and 10.5 inch. They are intended for the mounting of discreet components which would not normally be mounted in a 19inch enclosure. If required, more than one tray can be fitted to match the depth of the case, with a space to allow cables to be passed between them.

## CHASSIS TRAY SUPPORT KIT ORDERING INFORMATION

### CONTENTS OF KIT:

|      |   |
|------|---|
| 2off | Chassis Tray Support - 1.2mm Galvanised Steel |
| 4off | Fixing screws & Washers                       |

## CHASSIS TRAY KIT ORDERING INFORMATION

| Case Depth | Order Code |
|------------|------------|
| 260        | 70-4004030 |
| 300        | 70-4004031 |
| 400        | 70-4004032 |
| 500        | 70-4004563 |

### CONTENTS OF KIT:

|      |                                       |
|------|---------------------------------------|
| 1off | Chassis Tray - 0.9mm Galvanised Steel |
| 4off | Fixings screws & nuts                 |

## CARRY HANDLES

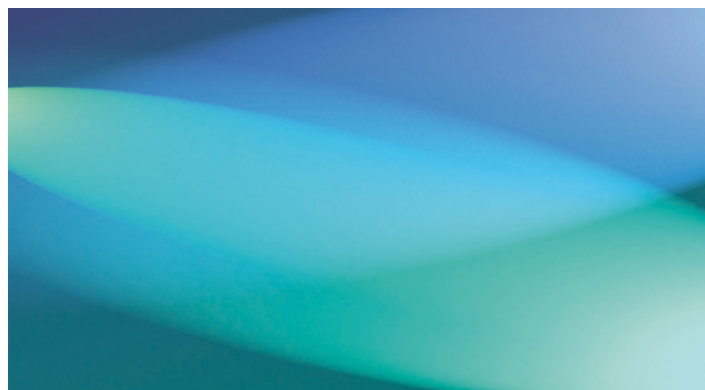
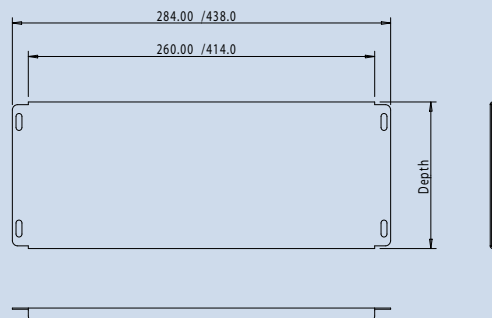
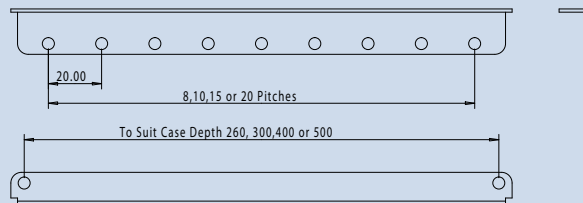
These are available to suite suit both 19 inch (Full width) and 10.5 inch (Half Width) Verotec cases and caseframes. They will hold up to 30kg and have a push button tilt mechanism in increments of 30 degrees. This allow the Verotec case to be carried or tilted on a work surface

## CARRY HANDLES ORDERING INFORMATION

| Depth | Width | Order Code |
|-------|-------|------------|
| Any   | 10.5  | 70-4004564 |
| Any   | 19    | 70-4004565 |

### CONTENTS OF KIT:

|         |  |
|---------|--|
| 2 off   | Side Arms – Polycarbonate mid grey BS4800-00-A05               |
| 2 off   | Location Mouldings - Polycarbonate mid grey BS4800-00-A05      |
| 2 off   | Push Button Mouldings – Polycarbonate light grey BS4800-00-A01 |
| 1 off   | Cross Bar – Extruded Aluminium, anodised                       |
| Fixings |  |



## TRANSPARENT HINGED DOOR KITS

Verotec Cases can be fitted with stylish and attractive transparent doors, which provide both security and improved aesthetics.

### CONTENTS OF KIT:

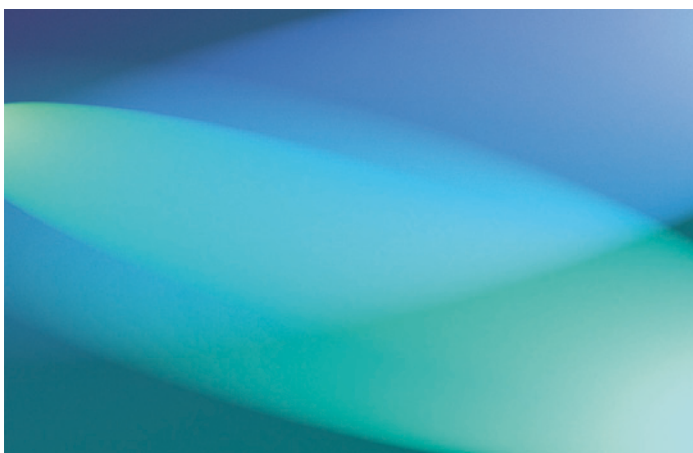
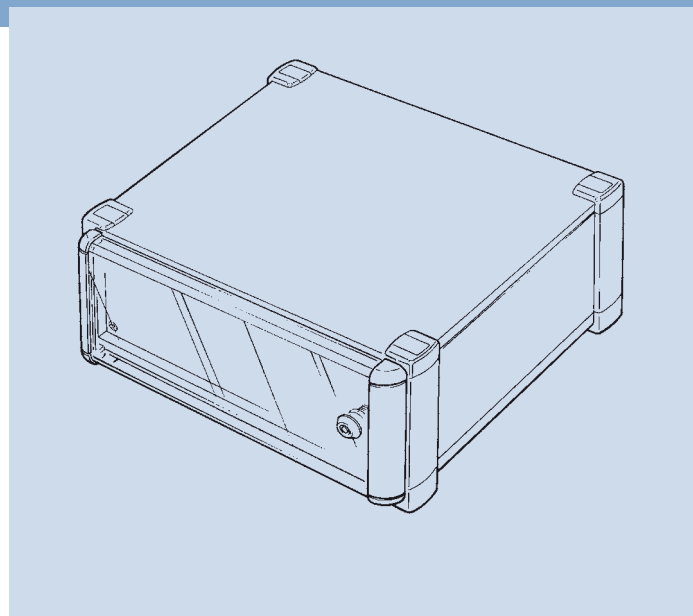
|   |                  |
|---|------------------|
| 1 | Transparent Door |
|   | Fixing Kit       |

### MATERIAL SPECIFICATION

|                    |                    |
|--------------------|--------------------|
| Extruded Sections  | : Aluminium Alloyl |
| Transparent Window | : 3mm Acrylic      |

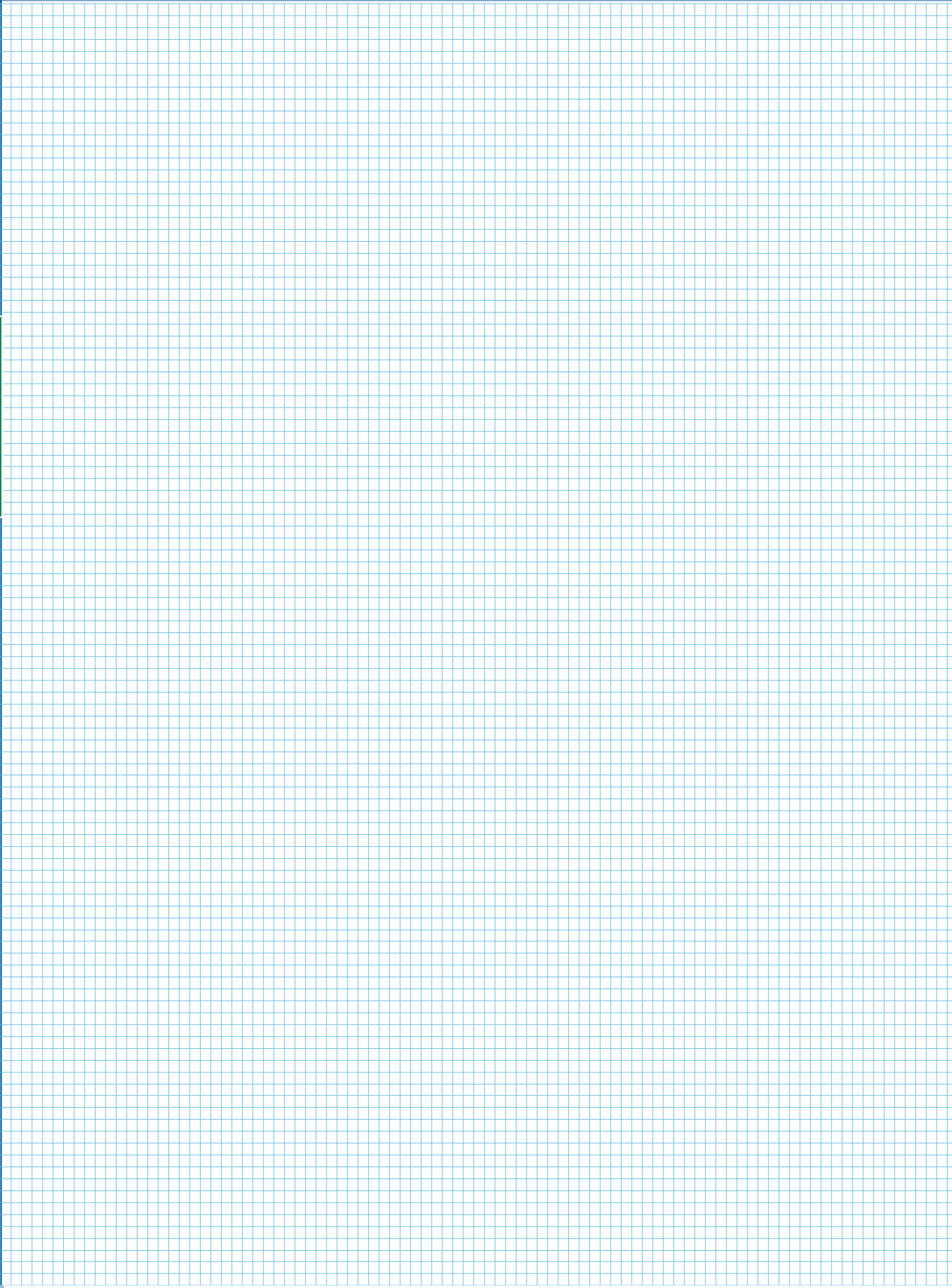
| Height | Width | Order Code |
|--------|-------|------------|
| 1U     | 10.5  | 70-4004566 |
| 1U     | 19    | 70-4004567 |
| 2U     | 10.5  | 70-4004568 |
| 2U     | 19    | 70-4004569 |
| 3U     | 10.5  | 70-4004570 |
| 3U     | 19    | 70-4004571 |
| 6U     | 10.5  | 70-4004572 |

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