

## 23.1" LCD Rackmount Marine Monitor



### Features

- ◆ Advanced Deep Dimming 1000:1
- ◆ Built-in External Power Relay
- ◆ Certified to IEC 60945
- ◆ Contrast Enhancing AR Safety Glass
- ◆ ECDIS & Radar Compliance
- ◆ Type Approvals Pending
- ◆ VGA to SXGA + PAL/NTSC/SECAM
- ◆ Video Buffer & Remote Control

### Introduction

KME has 'Marinised' a high resolution TFT panel to suit the equipment rack format.

Resolutions up to 1600 x 1200 pixels can be displayed with superb image quality.

To aid installation, flexible mounting combinations include 100mm VESA standard fixings at the rear, and a separate mounting bracket for Control Desk or Overhead positioning. The Monitor is manufactured in full compliance with IACS E10.

### Application

Designed with ECDIS and Radar in mind and to specifically meet the stringent demands of Shock, Vibration, EMC, EMI defined in the IEC 60945 International Standard for Maritime Navigation and Radio communications Equipment & Systems.

The monitor offers continuity by design for all Navigation and Ship Automation applications.

### KENT MODULAR ELECTRONICS LTD

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Due to a policy of continuous product development KME reserves the right to change specifications and descriptions without prior notification. All trade marks acknowledged.



## Technical Specifications

### Electrical Description

#### Display Characteristics:

Type: 23.1" Active Matrix (TFT)  
Dot Number: 1600 x 1200 pixels  
Dot Pitch: 0.294mm  
Response Time: 20ms average, typical  
Contrast Ratio: 600:1 min.  
Light Intensity: 250cd/m<sup>2</sup> typical  
Viewing Angles (at CR>10): 85° - Left, Right, Up, Down  
Backlight Life: 50,000 hours typical

#### Display Colours Analog Input:

Colour Depth: 16.7million (Depending on Graphics Card)

#### Video Signal:

Analog: RGB 0.7-1.0Vp-p  
Impedance: 75 Ohms

#### Sync Signal:

Sync. Type/Level: Separate H&V (+/-ve) TTL or Composite (-ve) TTL or Sync-on-Green (-ve) 0.3V

#### Synchronisation Range:

Horizontal Scan: 31 to 106kHz  
Vertical Scan: 60 to 85Hz

#### Resolutions:

VESA Support: 640 x 480 VGA  
800 x 600 SVGA  
1024 x 768 XGA  
1280 x 1024 SXGA  
1600 x 1200 UXGA\*

\* Recommended for Optimised Resolution

#### Composite Video Inputs:

PAL, NTSC & SECAM

#### Active Display Area:

470.4 x 352.8mm

#### Power Supply:

90-265V 50/60Hz: Internal (AC Version)

#### Power Consumption:

Operating: 100 W (Max.)

#### Environmental:

\*\*Operating Temp: -15 to +55°C (IEC 60945 tests)  
Storage Temp: -20 to +60°C  
Operating Humidity: 30% to 90% (non condensing)  
Storage Humidity: 10% to 90% (non condensing)

\*\*Quoted EN60945 test. We DO NOT recommend routine operation @ extreme temperatures.

### Mechanical Description

#### Construction:

Housing: Aluminium  
Safety Glass: Toughened, Optically Coated and Contrast Enhancing  
Sealing: Front Panel IP65

#### Dimensions:

Monitor: 584 x 534 x 97.5mm  
Weight (approx): 16kg.

#### Input Connectors:

RGB Signal: 15-pin HD Female D-Type  
Video Signal: RCA + S-video socket  
RS232 Remote Control: 9-pin Female D-Type  
Power: 3-Pin IEC Male

#### Output Connectors:

Video Buffer (Multi-Drop): 15-pin HD Male D-Type  
\*\*\*Capacitive Touch Screen: 9 pin Female D-Type  
RS232 Remote Control: 9-pin Male D-Type  
Ext. Power Relay: 3-Pin IEC Female

#### User Controls:

Front Panel: Power On/Off (Pushbutton), Rotary Brightness & Contrast, Power LED Indicator

Behind Cover on Front Panel: OSD Functions

### Approvals

#### IEC 60945:

Tested to IEC 60945 4th Edition

#### Type Approvals:

LRS Lloyds Register of Shipping - In Progress

We will apply to the following classification societies where demand justifies:-

ABS American Bureau of Shipping  
ClassNK Nippon Kaiji Kyokai  
DNV Det Norske Veritas  
GL Germanischer Lloyd

#### ECDIS & Radar compliance:

To be tested for IEC 61174 compliance by BSH

### Ordering Codes

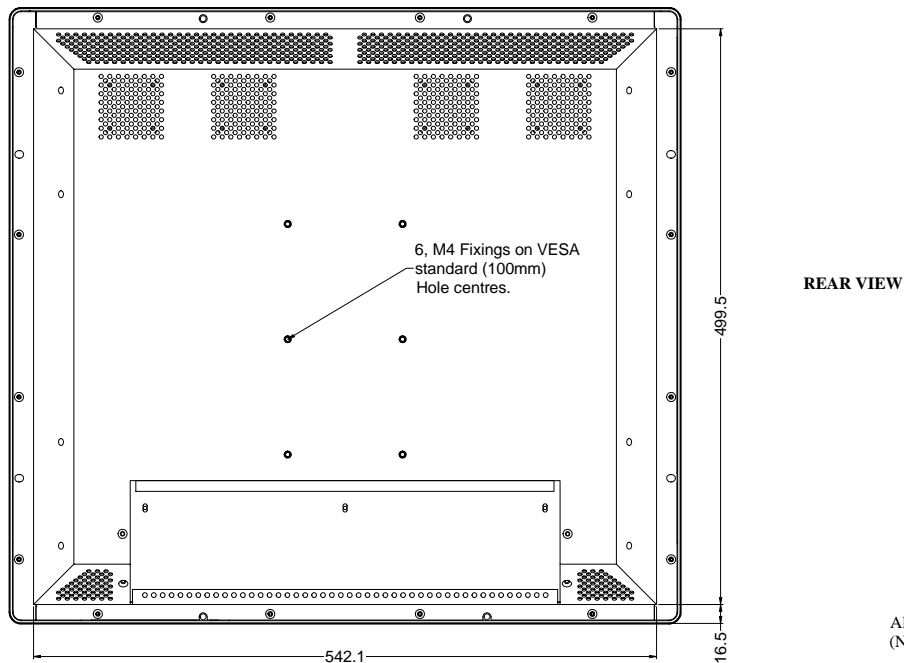
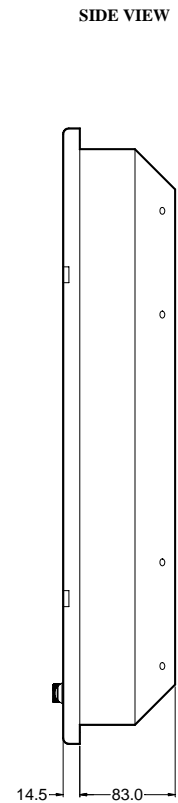
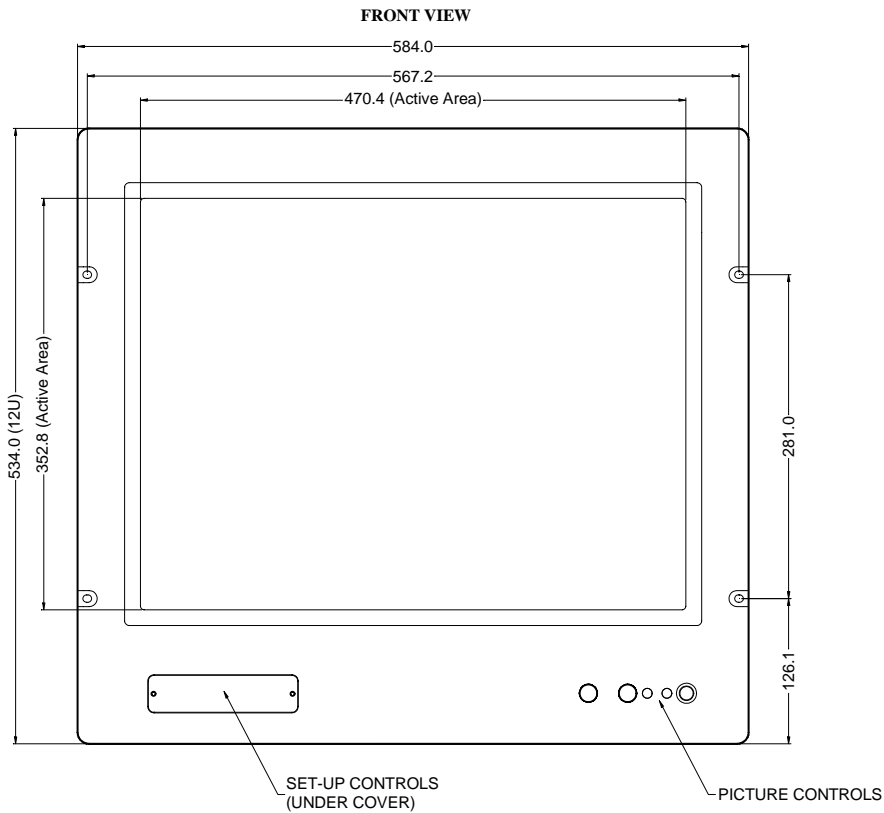
#### Standard Configuration:

Monitor: 29LR233A35MP

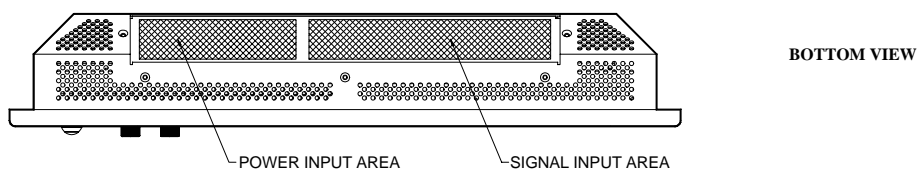
#### Ancillaries/\*\*Options:

Mounting Bracket: 29ST0013  
Sunvisor: On Request  
Capacitive Touch Screen: On Request

## Mechanical Specifications



All dimensions in millimetres  
(Not to scale)



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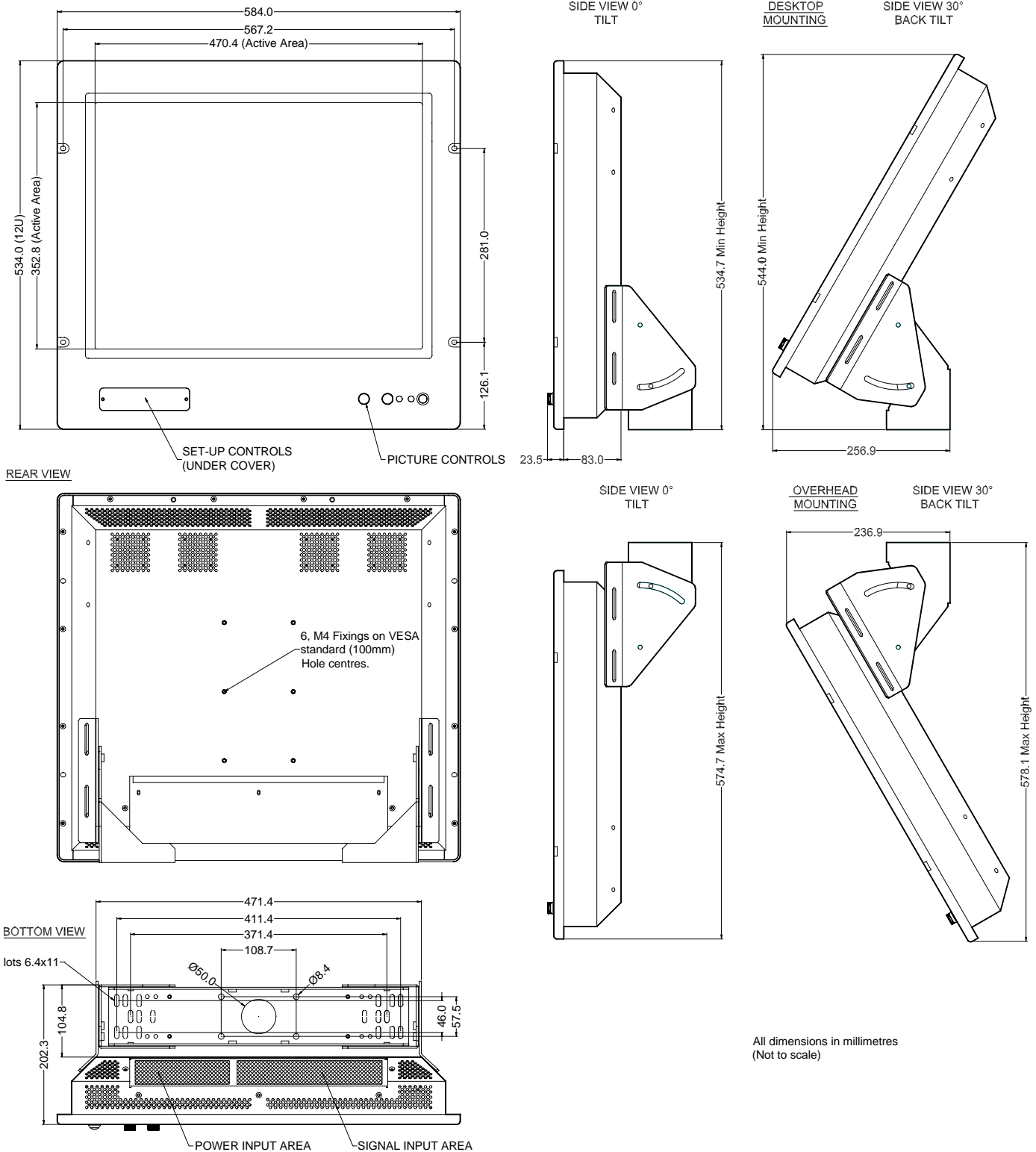
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## Mounting Bracket - 29ST0013



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