WAVE 19" MONITOR

The Wave Monitors are a series of well-designed, rugged LED displays. Our monitors are built following a modular approach, making them suitable for OEM as well as Private Label versions.

Our displays can be flush mounted with a panel mounting kit or standing with hinge mounted to table. It can even be mounted with hinge hanging from the roof (no HMI). Sunshade and Vesa adaptor are also available.

All our monitors are provided with AC/DC inputs and can even be used as a part of a UPS system. For improved performance and reliability backlight is based on LED technology.

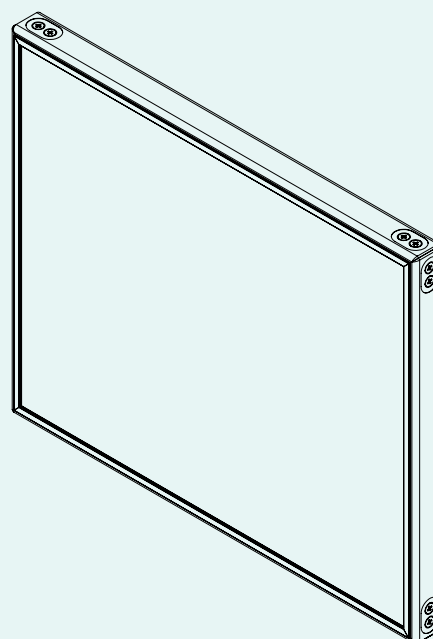## TECHNICAL SPECIFICATIONS 19" WAVE MONITOR
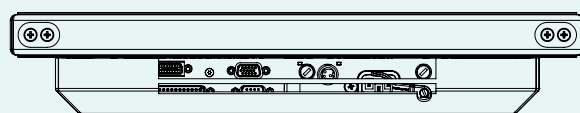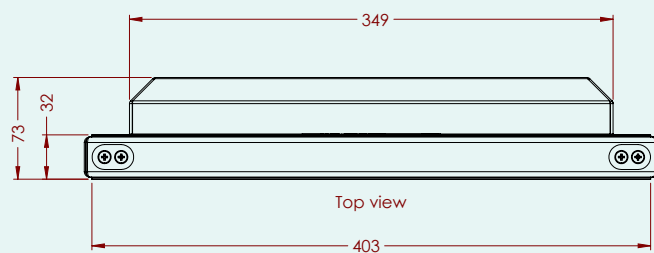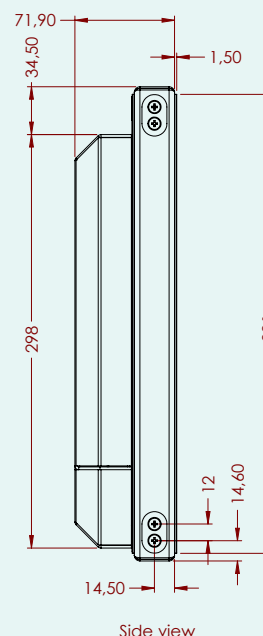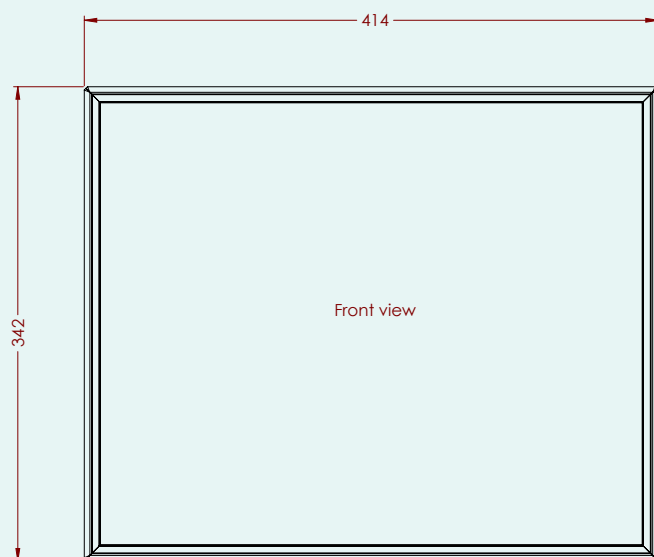
MATCHING STANDARDS	IEC 60945, IEC 61174 (ECDIS), IEC 60936 (RADAR), IEC 62.288, IEC 62.388, IEC 60529 (IP), IACS E10. Designed to comply with MIL-STD-810F & MIL-STD-901D. Reports available on request.
DISPLAY SIZE	19.0" - 482.6 mm, active area 376.32 (Hor) x 301.06 (V) mm
OVERALL DIMENSIONS	414 (W) x 342 (H) x 73.4 (D) mm - console mounting (ex mounting kit) 414 (W) x 377 (H) x 73.4 (D) mm - with Hinge (ex HMI)
NET/GROSS WEIGHT	7,9 Kg (monitor with hinge and HMI)
RESOLUTION	Max 1280 x 1024 pixels (SXGA)
SYNCHRONISATION	Separate/Composite, 15-100 kHz (H), 30-65 Hz (V)
RESPONSE TIME	20 ms
CONTRAST RATIO	2000:1 (typ)
DOT PITCH	0.294 (H) x 0.294 (V) mm
LIGHT INTENSITY	300 cd/m2 (typ)
NUMBERS OF COLOURS	16.7 Millions depending on graphics card
VIEWING ANGLE	±89°
CONTROLS KNOBS	Lock, +, -, (Brilliance), Set, Menu and Power
INDICATORS	Power indicator, AC or DC
DC VOLTAGE OUT	12 VDC, 30W, connector KPXJ-3S, matching male connector KPPX-3P
SUPPLY VOLTAGE	90-264 VAC, 24 VDC -20/+30%
POWER CONSUMPTION	App.45 W (AC) / 45 W (DC)
COLOURS	Front & back: RAL 9005 structure. Stand RAL 9005 structure.
ENCLOSURE PROTECTION	IP 42
GLASS TYPE	Conturan® or Glacier AR antiglare coated
CONTROL INPUT	RS 232 D-SUB 9 pin female
OPERATING/STORAGE TEMP.	-15/+55° C. +5/131° F (IEC 60945) / -20/+60° C. -4/140° F
INPUT	DVI-I (Analogue and Digital), VGA, Composite video, S-Video, AC power IEC Inlet & DC screw terminal
BACKLIGHT LIFE	Typ. 50.000 hours
DIMMING RANGE	0-100%
ACCESSORIES	Sunshade WA190-01.SUN.01, Panel Mounting Kit WA190-01.PAN.01, Panel Mounting Kit incl HMI WA190-02.PAN.01, Vesa adaptor WA190-01.VES.01

CONFIGURATION-0001 FLUSH MOUNTED

CONFIGURATION-1001 MOUNTED ON HINGE (NO HMI)

CONFIGURATION-2001 MOUNTED ON HINGE (WITH HMI)

CONFIGURATION-3001 TOP MOUNTED HINGE (NO HMI)

CONFIGURATION-4001 PANEL MOUNTED WITH INTEGRATED HMI

CONFIGURATION-5001 PANEL MOUNTED WITHOUT INTEGRATED HMI

ALTRONICS
CS 69024, F-69811 Tassin

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www.altronics.fr

NORTH INVENT

WAVE 19" MONITOR

Note: All dimensions are in mm.

Front view

Side view

Top view

Bottom view

The following is enclosed in a standard delivery:
1 x WA190-01.MON.01-5001, 19,0" Monitor
1 x User Manual for Wave Monitors (identical for 19", 21.5" , 24 & 27" monitors) 1 x Power AC Cable / 1 x DC plug / 1 x VGA Cable

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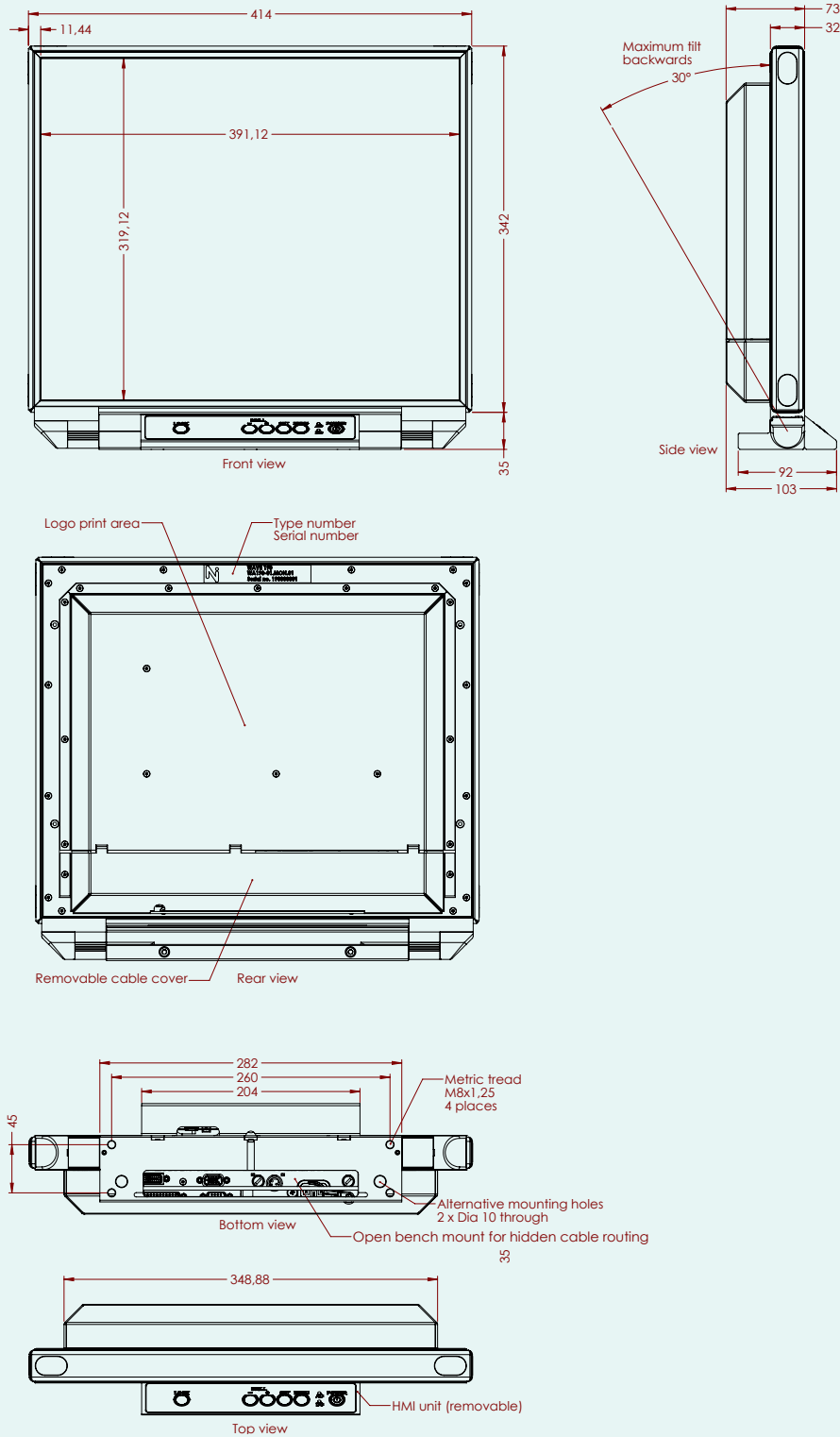Tel : +33 (0) 472 370 470

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WAVE 19" MONITOR

Note: All dimensions are in mm.

Front view

Side view

Maximum tilt backwards 30°

Logo print area

Type number
Serial number

Removable cable cover — Rear view

Metric tread
M8x1,25
4 places

Alternative mounting holes
2 x Dia 10 through

Bottom view

Open bench mount for hidden cable routing

Top view

HMI unit (removable)

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WAVE 19" MONITOR

WAVE 19" WITH TOP MOUNTED HINGE: WA190-01.MON.01-3001

Note: All dimensions are in mm.

Mounting holes for the HMI unit covered when not in use

376

Front view

NOTE
Top-mounted monitor does not use HMI unit

62

Cable direction

Electronics unit can be rotated180 degrees when using top-mounted solution

30°

Maximum tilt backwards

Side view

Top view

Bottom view

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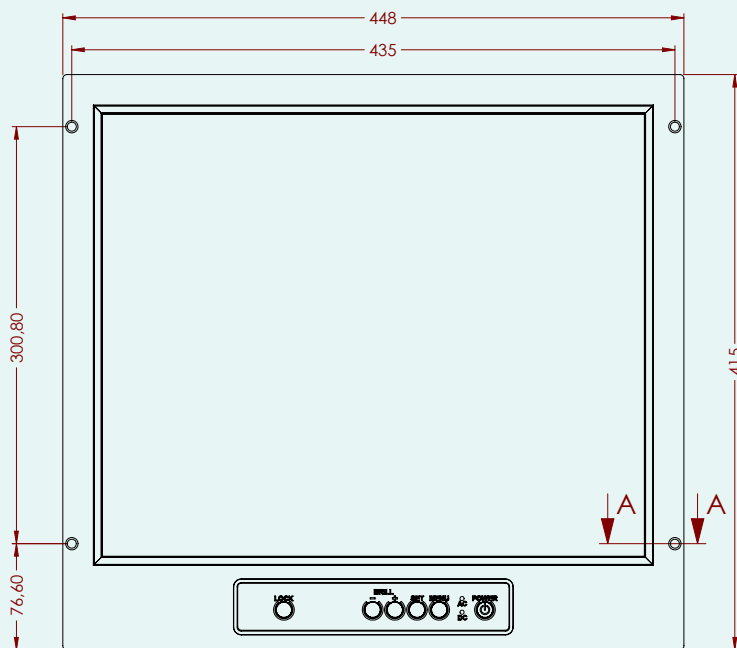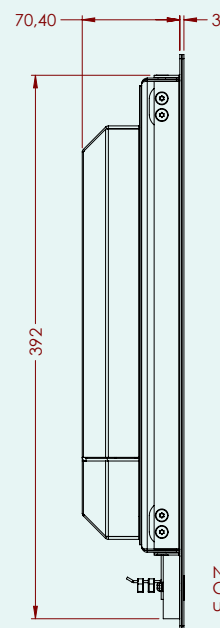info@altronics.fr
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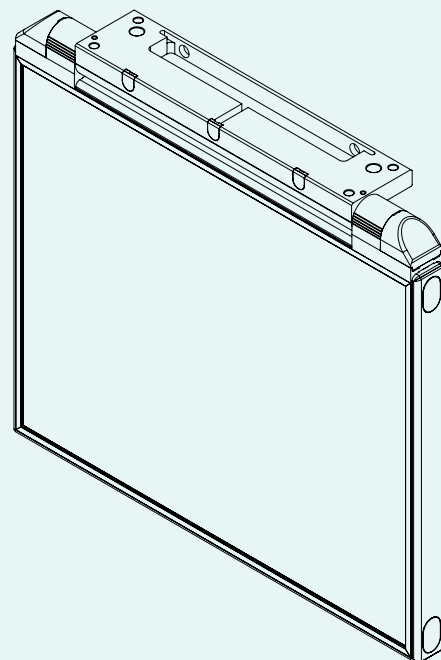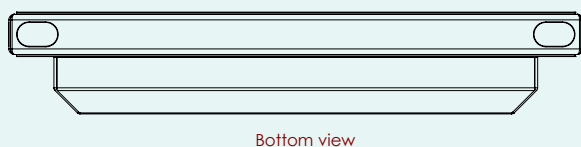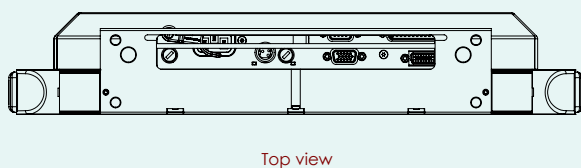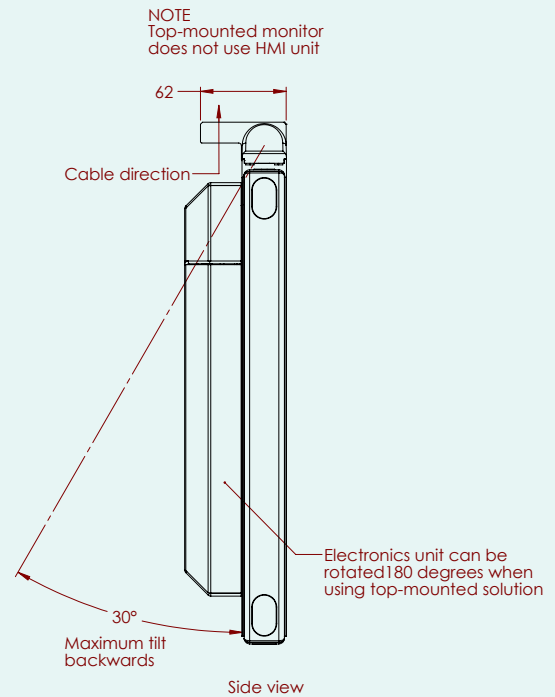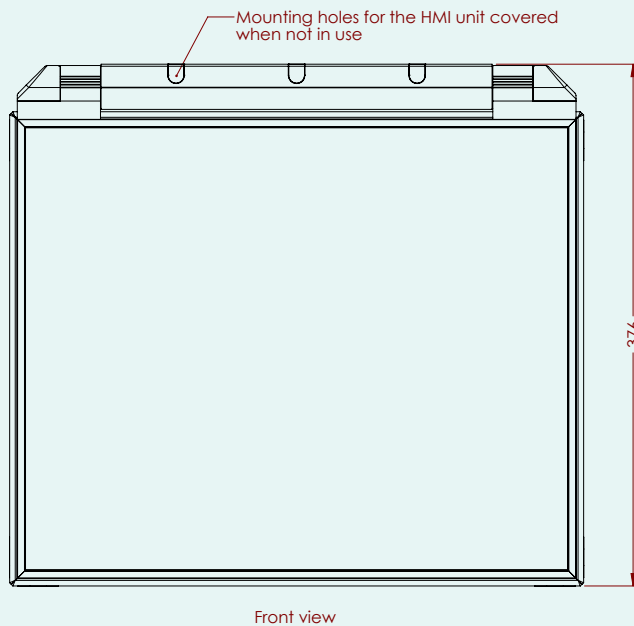
WAVE 19" MONITOR

WAVE 19" PANEL MOUNTED WITH INTEGRATED HMI: WA190-01.MON.01-4001

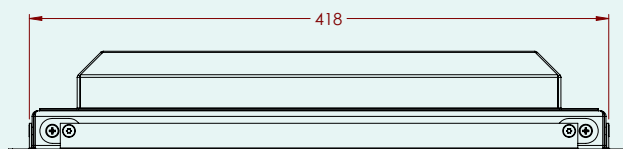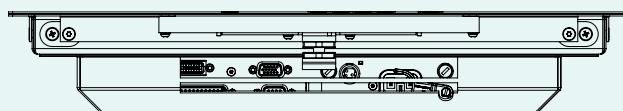Note: All dimensions are in mm. Outer dimensions are flexible.

448
435
300.80
415
76.60

Front view

70,40
3
392

NOTE
Cable from the HMI
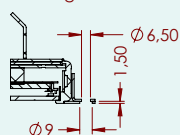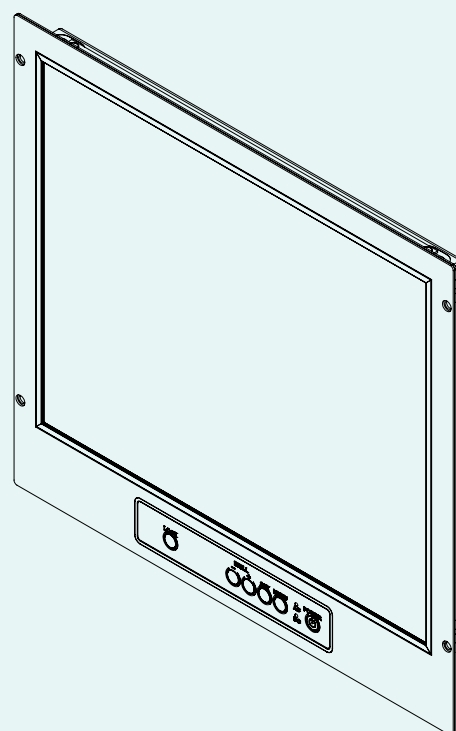unit is not shown

Side view

418

Top view

Bottom view

Mounting hole

Ø 6,50
1,50
Ø 9

Recommended screw
Contersunk flat head screw
ISO 7046 M4 X L

SECTION A-A

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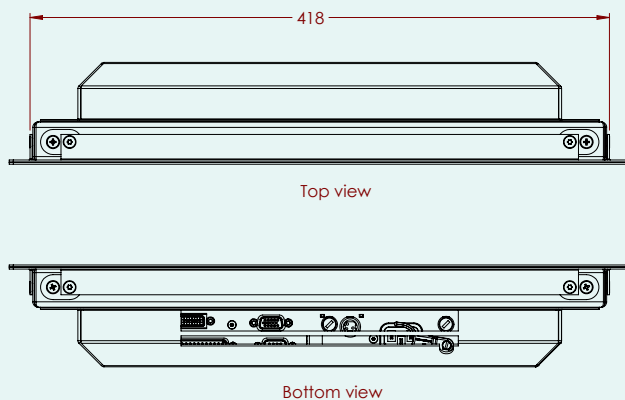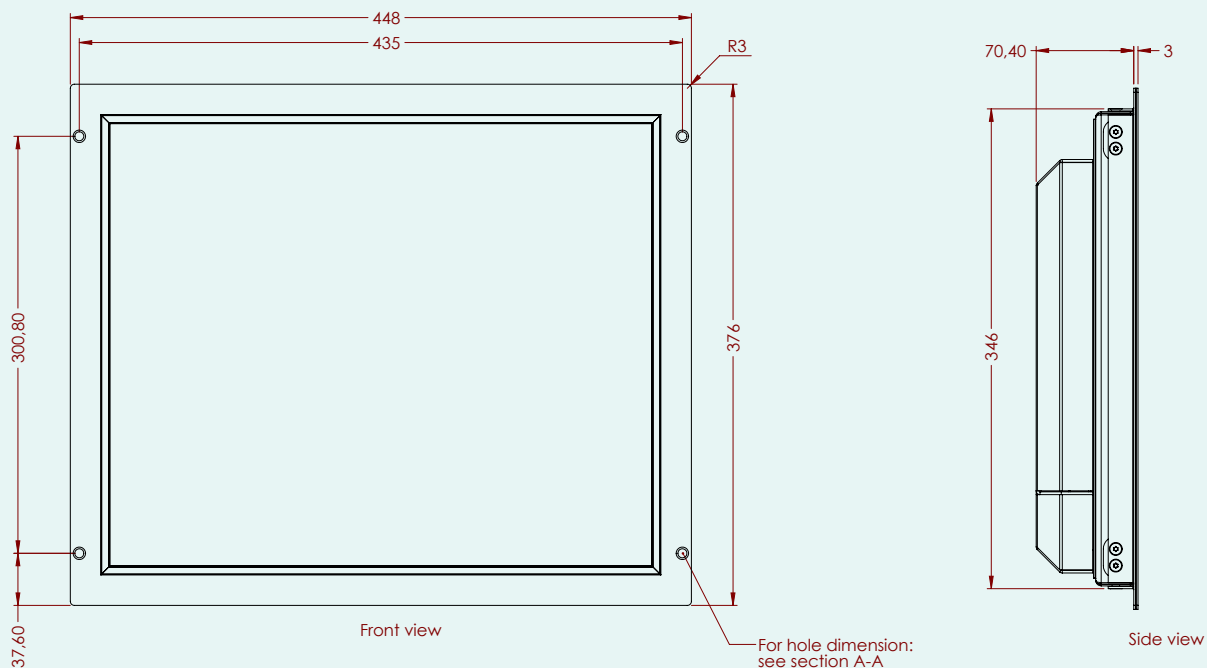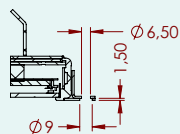www.altronics.fr

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WAVE 19" MONITOR

WAVE 19" PANEL MOUNTED WITHOUT INTEGRATED HMI: WA190-01.MON.01-5001

Note: All dimensions are in mm. Outer dimensions are flexible.
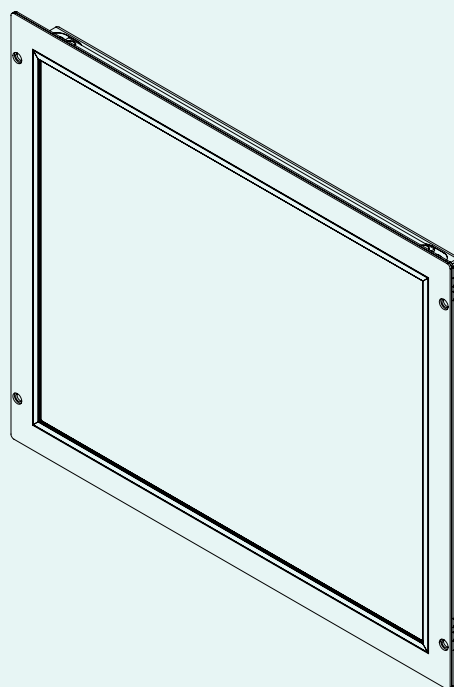
448

435

R3

70,40

3

300,80

376

346

37,60

Front view

For hole dimension:
see section A-A

Side view

418

Top view

Bottom view

Mounting hole

Ø 6,50

1,50

Recommended screw
Contersunk flat head screw
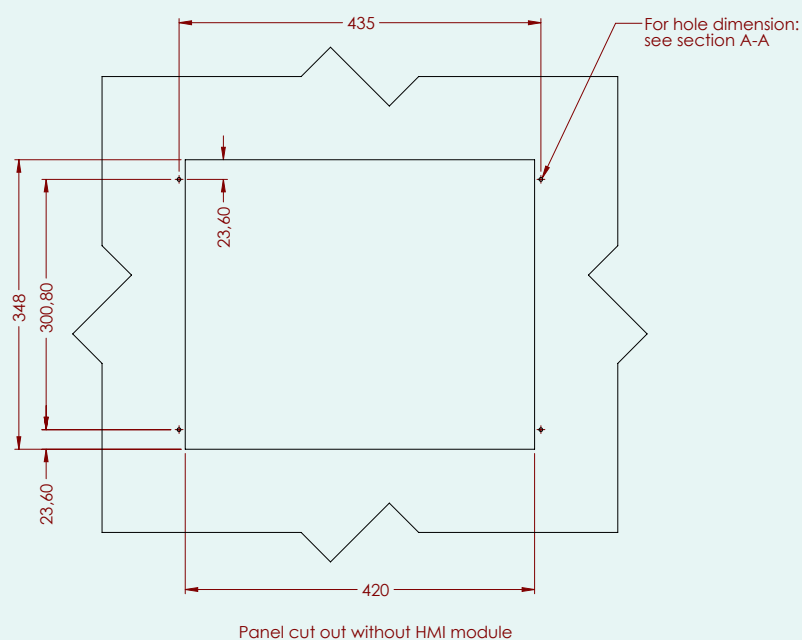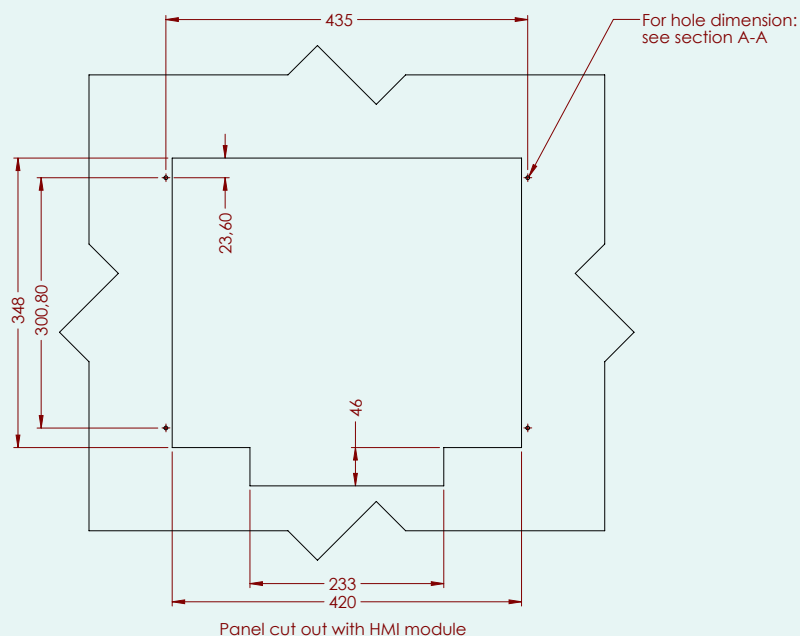ISO 7046 M4 X L

Ø 9

SECTION A-A

WAVE 19" MONITOR

WAVE 19" PANEL CUT OUT FOR PANEL MOUNTING KITS

Note: All dimensions are in mm.

435

For hole dimension:
see section A-A

23,60

348

300,80

46

233

420

Panel cut out with HMI module

435

For hole dimension:
see section A-A

23,60

348

300,80

23,60

420

Panel cut out without HMI module

Part description: WAVE 190 panel cut out with and without HMI module)

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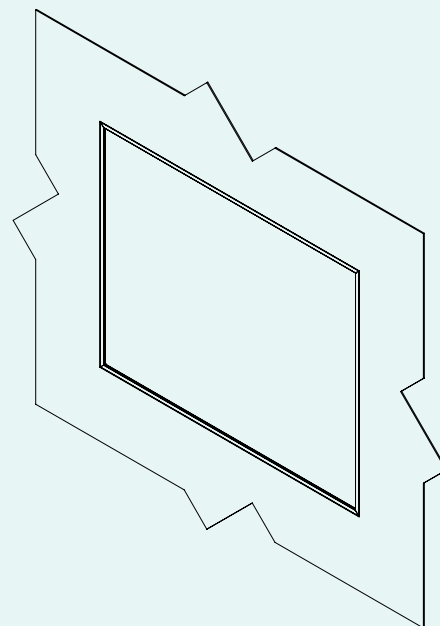www.altronics.fr

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WAVE 19" MONITOR

WAVE 19" PANEL CUT OUT FOR FLUSH MOUNTING FROM BACKSIDE

Note: All dimensions are in mm.

404 (panel cut out)

332 (panel cut out)

User panel

1,50

P-11351 (or similar)
Welded or bolted
to user panel

1,50

23

Thickness

A
Suggestions for alternative panel thickness

P-11351 (or similar)

1,50

B
Suggestions for alternative panel thickness

P-11351 (or similar)
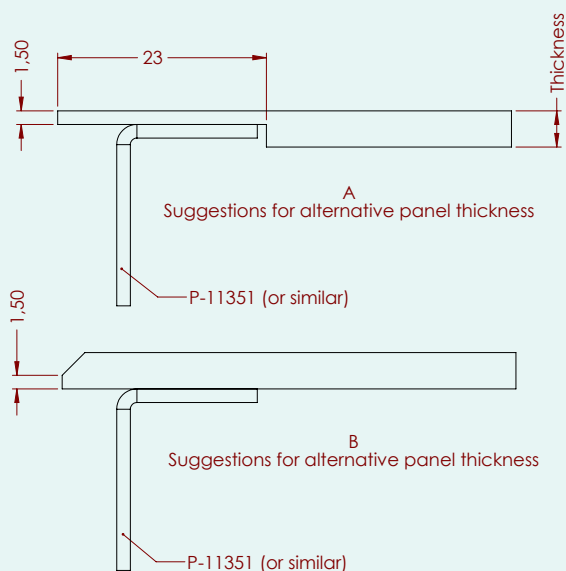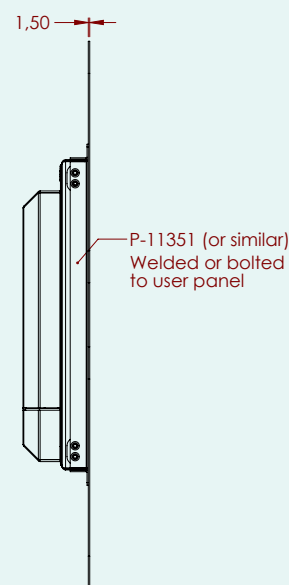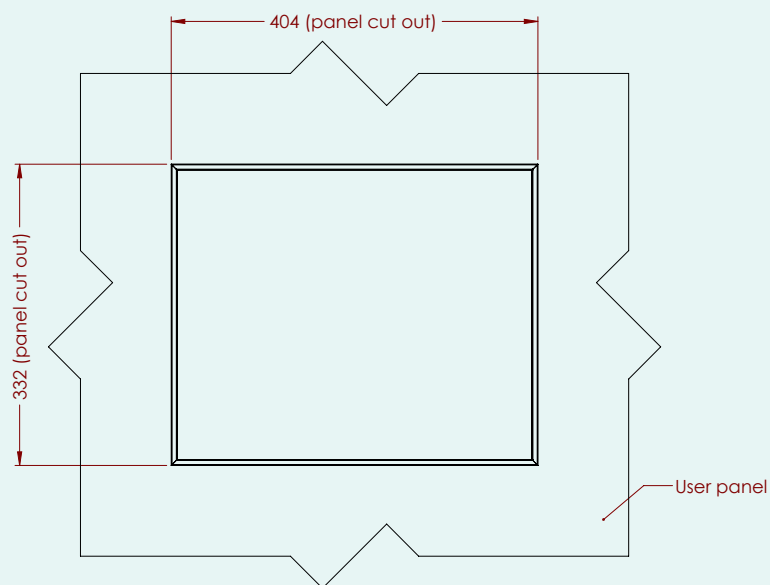
WAVE 19" MONITOR

WAVE 19" HMI STAND ALONE CUT OUT: WA–01.HMI.02.0001

Note: All dimensions are in mm.

Ø 4 THRU
Ø 6,50 X 90°

270

60

R6

39   3

46

Bracket for cable ties

231

HMI module WAVE type

Only for use with panel mounted monitor

Metric thread M3 or customer specified screw

36

233

48

250

Panel Cutout