

# **WAPi Imtech Bridge Guard**

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## Table of contents

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	Page #
<b>Figures .....</b>	<b>3</b>
<b>References .....</b>	<b>5</b>
<b>Abbreviations list .....</b>	<b>6</b>
<b>1. Overview .....</b>	<b>7</b>
<b>2. The screen .....</b>	<b>7</b>
<b>3. Specification .....</b>	<b>8</b>

## Figures

Figure 2-1: BNWAS screen	7
Figure 3-1: Dimensions	8
Figure 3-2: Specifications	9
Figure 3-3: RS 232 pin-out	10
Figure 3-4: Power	10

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## References

IMO Res.A.694(17), MSC.128(75), MSC.191(79), IEC 60945 (2002) inc. corr.1 (2008), IEC 61162 Series, IEC 62288 Ed.2.0 (2008), IEC 62616 (2010) , IEC 61696-1 IEC FDIS Ed.2 TC80-690 FDIS VDR, IEC 61924-2 NEN-EN-IEC Ed.1 2012-12

ACC-4111A-RADAR-GBD

## Introduction

The Imtech Unimacs 4500 is an integrated bridge system. It has an application manager that lies on top of all the separate modules. This app manager has a button that can start the dedicated BNWAS module that runs on the system. This system runs in the background and will get to the front as soon as attention is required.

## Abbreviations list

BNWAS	Bridge Navigational Watch Alarm System
WAPi	Watch Alarm Panel integrated

## 1. Overview

When possible you can combine the 2<sup>nd</sup> and 3<sup>rd</sup> stage alarm panels with the (already available) DAP's in the diverse cabins. The Dap is a dedicated duty alarm panel that can function in the Imtech NavVision AM(C)S as a standalone monitor and duty selection panel. When already there it can be combined with the BNWAS to also fulfil the role as a 2<sup>nd</sup> or 3<sup>rd</sup> stage alarm panel.

## 2. The screen

The screen on the Dap will show everything the same way as the Main AM(C)S screen. It will pop-up as soon as an alarm is triggered. The DAP's are Beijer Exter T70-bl (see chapter Specification) and look as in the following figure.

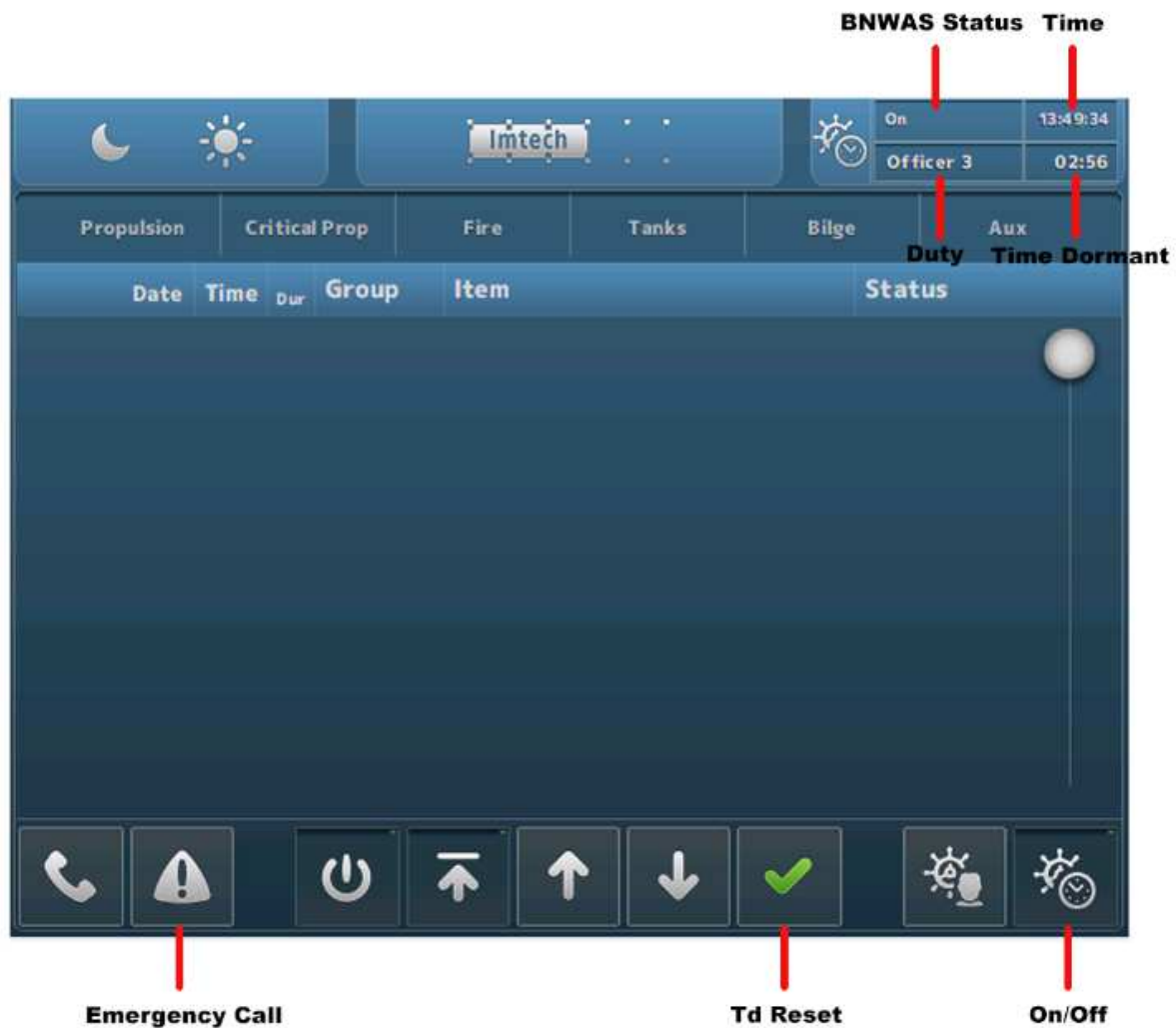


Figure 2-1: BNWAS screen

All the necessary items are available.

### 3. Specification

- Installation plate thickness: 1.5 - 9.0 mm (0.06 - 0.35 inch)
- Space requirements when installing the operator panel:

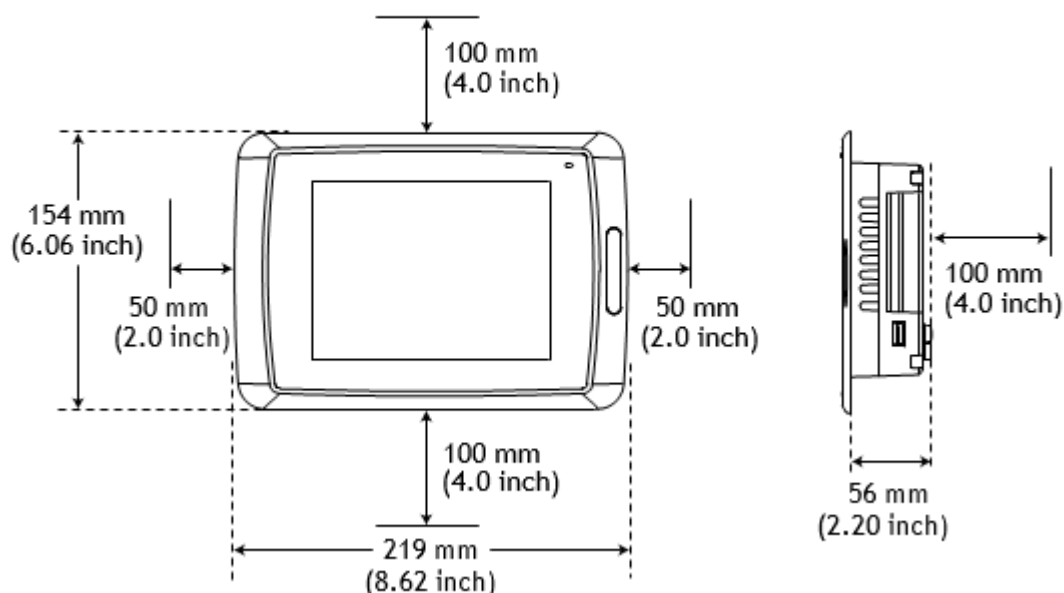


Figure 3-1: Dimensions

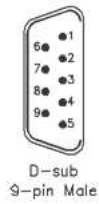
Parameter	EXTER T70
Front panel, W x H x D	219 x 154 x 6 mm



Mounting depth	56 mm (156 mm including clearance)
Front panel seal	IP 66
Rear panel seal	IP 20
Keyboard material/ Front panel	Touch screen: Polyester on glass, 1 million finger touch operations. Overlay: Autotex F157 or F207 *.
Reverse side material	Powder-coated aluminum
Weight	1.2 kg
Serial port RS422/ RS485	25-pin D-sub contact, chassis-mounted female with standard locking screws 4-40 UNC.
Serial port RS232C	9-pin D-sub contact, male with standard locking screws 4-40 UNC.
Ethernet	Shielded RJ 45
USB	Host type A (USB 1.1), max output current 500mA Device type B (USB 1.1)
CF-slot	Compact flash, type I and II
Flash memory for application	12 MB (incl. fonts)
Real time clock	±20 PPM + error because of ambient temperature and supply voltage. Total maximum error: 1 min/month at 25 °C Temperature coefficient: 0.004 ppm/°C <sup>2</sup>
Real time clock battery	CR2450 (UL and cUL: Sanyo or Panasonic) Minimum lifetime: 3 years
Power consumption at rated voltage	Normal: 0.4 A Maximum: 0.9 A
Display	TFT-LCD. 640 x 480 pixels, 64K color. CCFL backlight lifetime at the ambient temperature of +25 °C: >50,000 h.
Active area of display, W x H	131.5 x 98.6 mm
Fuse	Internal DC fuse, 3.15 AT, 5 x 20 mm
Power supply	+24V DC (20 - 30V DC). Power supply connector. CE: The power supply must conform with the requirements according to IEC 60950 and IEC 61558-2-4. UL and cUL: The power supply must conform with the requirements for class II power supplies.
Ambient temperature	Vertical installation: 0 ° to +50 °C Horizontal installation: 0 ° to +40 °C
Storage temperature	-20 ° to +70 °C
Relative humidity	5 - 85 % non-condensed
CE approvals	Noise tested according to EN61000-6-4 emission and EN61000-6-2 immunity.
UL, cUL approvals (when product or packing is marked)	UL 1604 Class I, Div 2 / UL 508 / UL 50 4x indoor use only
DNV	Yes
NEMA	4x indoor use only

**Figure 3-2: Specifications**

## RS-232



Pin no	Signal	Signal Name	Signal direction
1	DCD	Data Carrier Detect	Input
2	RD	Receive Data	Input
3	TD	Transmit Data	Output
4	DTR	Data Terminal Ready	Output
5	SG	Signal Ground	-
6	DSR	Data Set Ready	Input
7	RTS	Request To Send	Output
8	CTS	Clear To Send	Input
9	RI	Ring Indicator	Input

Figure 3-3: RS 232 pin-out

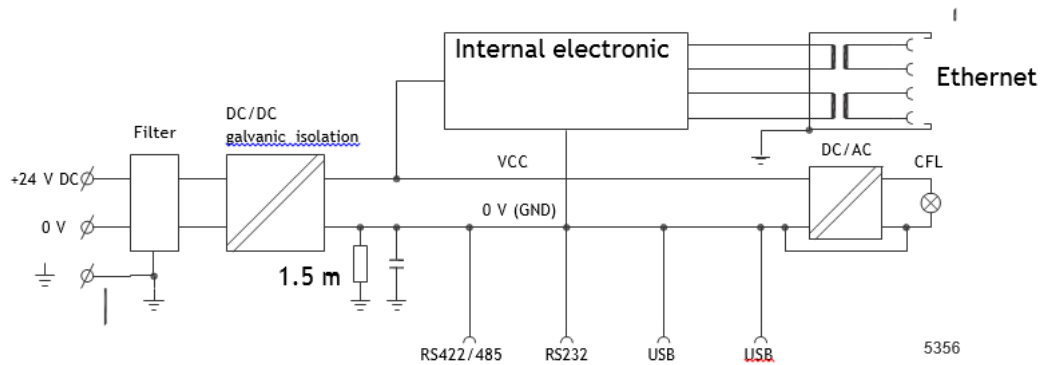


Figure 3-4: Power