Product description Imtech Bridge Guard

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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

Introduction

The Imtech Bridge Guard BNWAS system is a dedicated stand-alone BNWAS system that can run separately on any ship. Besides that it can be fully integrated into the Bridge solutions from Imtech, thus forming an indissoluble interconnected solution. This product description will show the parts of which the BNWAS consists together with all of its dependencies.

Abbreviations list

BNWAS	Bridge Navigational Watch Alarm System
AMCS	Alarm Monitoring and Control System
Td	Time dormant
WAP	Watch Alarm Panel
ICD	Interface Control Document
CAM	Centralized Alarm Monitor
VDR	Voyage Data Recorder

1. Introduction

Product Description: Bridge Navigational Watch Alarm System (BNWAS)

Product Name: Imtech NavVision BNWAS

Trade Name: **Imtech Bridge Guard**

Specified Standards: IMO Res.A.694(17), MSC.128(75), MSC.191(79), IEC 60945 (2002) inc. corr.1 (2008), IEC 61162 Series, IEC 62288 Ed.1.0 (2008), IEC 62616 (2010)

Standard equipment:

Beijer T70-bl (including NMEA-port)	IBG-HMI 214-1-0-1
Wago I/O system 750	IBG-PLC 214-2-0-1

Additional equipment:

Imtech NavVision AM(C)S Bridge Wago PLC (integrated)	IBG-PLCi 214-2-1-1
Phoenix Contact FL switch SFNT series	IBG-SW 214-3-0-1
Moxa EDS 518A series	IBG-SW 214-3-0-2
Watch Alarm Panel Bridge	IBG-WAP 214-4-0-1
Watch Alarm Panel 2nd stage	IBG-WAP 214-4-0-2
Watch Alarm Panel 3rd stage	IBG-WAP 214-4-0-3
Watch Alarm Panel (Integrated DAP)	IBG-WAPi 214-4-1-1
Reset Button	IBG-RB 214-5-0-1
Reset Button (integrated in bridge panel)	IBG-RBi 214-5-1-1
Imtech NavVision AM(C)S Display (integrated)	IBG-AMS 214-6-0-1

Optional equipment:

Phoenix Contact Quint UPS/24VDC/24VDC	IBG-UPS 214-7-0-1
Phoenix Contact Quint UPS Battery	IBG-UPS 214-7-0-2

Documentation: ACC-Imtech-NavVision-BNWAS-Manual v1.4

Test report: issue xxx

2. Overview

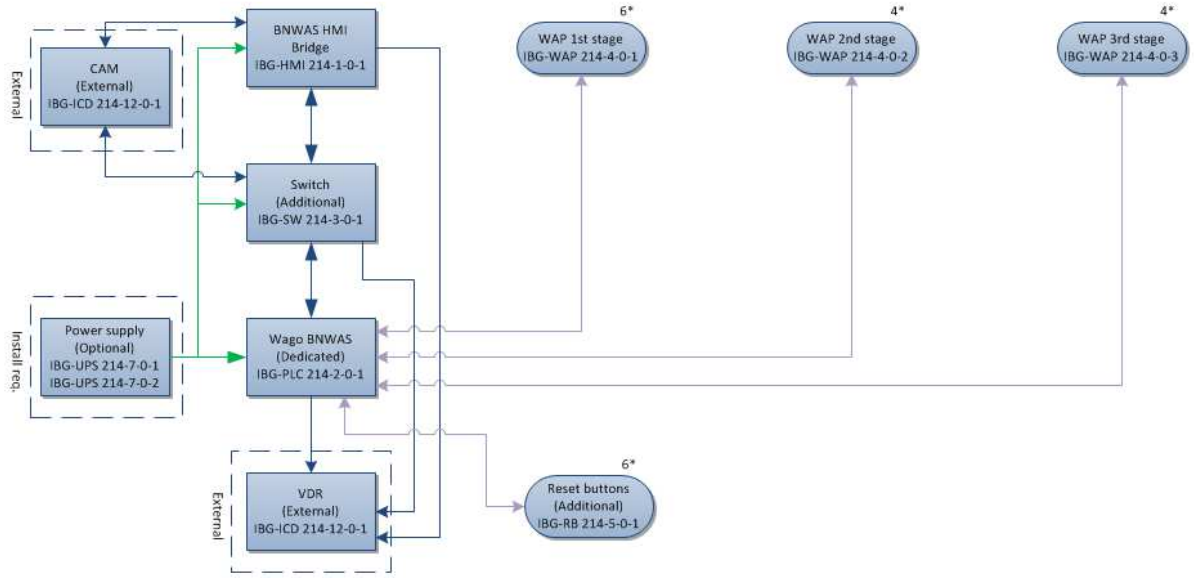

Figure 2-1: BNWAS standard setup

The standard (or Standalone) BNWAS consists of the devices as shown above (see Figure 2-1). The absolute minimum requirement is a HMI panel PC and a dedicated Wago PLC. These items are documented in the manuals IBG-HMI 214-1-0-1 and IBG-PLC 214-2-0-1.

: The serials in the figure, like IGB-XXX 214-x-x-x refers to the specified manuals on that item that can be found on sharepoint.

This standalone system can also be integrated in the Imtech Unimacs bridge, or in the NavVision AM(C)S system. In that case a few extra items will be added to the standard topology. This can be an addition to the standard topology, but it can also replace items in the standard setup. Reset buttons can be made obsolete because there is a screen with a reset button on the AM(C)S at every control position and EVE-messages can be used to comfirm the ability of the OOW, also WAP panels can be redundant because there are already DAP's in the 2nd and 3rd stage cabins.

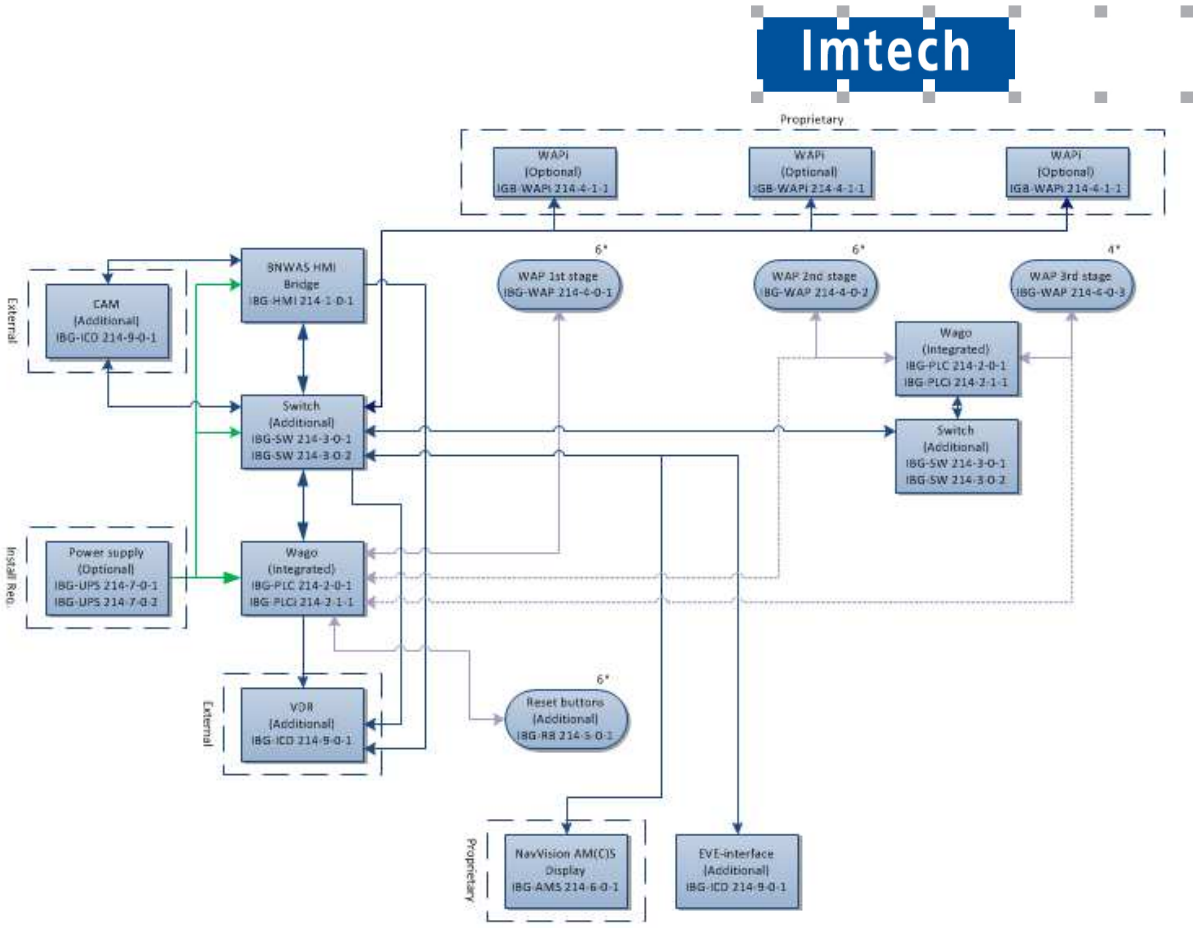

Figure 2-2: BNWAS integrated setup

3. Installation requirement Power supply

Derived from the NEN-EN-IEC 62616 Chapter 5 (Design and installation requirements), paragraph 5.3 (Power supply), the following installation requirement will be observed:

(128/A6.3) The BNWAS shall be powered from the ship's main power supply. The malfunction indication, and all elements of the Emergency Call facility, if incorporated, shall be powered from a battery maintained supply.

Taking in consideration that the following test of this requirement will be fully incorporated and obliged to:

Confirm by inspection of documented evidence and measurement that when the supply of power is removed from the equipment the malfunction indication and Emergency Call facility operates for a period of 6 h.

Considering this, the installation will be powered in such a way, that all parts of the BNWAS that holds the malfunction indication (Wago, DAP) and the emergency call function (Wago, DAP, Switches) will function for an additional 6 hour after loss of power.