



**FORTEC**  
GROUP

**BLO-Line®**

Blaze load optimized monitors 31.5 inch — according to class A1

One partner, unlimited technology solutions

# Product Features

Designed,  
developed and  
made in Germany

Protection against fire hazard and the assessment of fire behaviour of building materials is a basic presumption when planning and constructing buildings. Public areas, which are also marked emergency exit routes within buildings must be accessible in case of fire. Flammable materials with high risk of smoke gas development must not be used or installed in those areas.

Fire safety regulations avoid the installation of devices which are supposed to increase fire load and to promote development of smoke gas. FORTEC Integrated designed and developed a monitor series optimized in the contribution to fire and smoke gas emission for usage in public areas and buildings. BLO Monitors are available with two different reaction to fire classification levels.

## BLO-Line® monitors: Safety first

The European Standard EN13501-1 enables the classification of building materials and components in terms of fire behavior and fire resistance. Additional criteria take a product's tendency to produce smoke and flaming droplets or particles into consideration. Since there is no such classification procedure for electronic devices, monitors are tested in compliance with the SBI method according to EN 13823:2015-02 standard, which specifies a method of test in order to determine the behaviour of fire performance of construction products when exposed to thermal attack by a single burning item (SBI).

The required fire test was conducted in accordance with the above mentioned standards on the premises of the Leipzig Institute for Materials Research and Testing, a recognised, notified and accredited testing, inspection and certification body in Germany. The results have been verified and certified by an independent expert. The results of the fire tests allow FORTEC Integrated to offer fire load optimized monitors in accordance with the classifications A1 (non-combustible materials - no contribution to fire).

The BLO-Line® is classified and certified according to class A1. Consequently, it meets the respective fire safety regulations. The BLO-Line® therefore also fully comply with the requirements of the VdS 6024 leaflet on fire protection for electrical devices in sensitive areas. BLO-Line monitors may be also equipped with an optional extinguishing device or even engineered for a higher IP rating. Thus, our BLO-Line® monitors are most suitable for installation as information systems in public buildings, such as hospitals, universities, schools, airports and other public areas in buildings. They are available as common monitors or as an independent system with integrated PC. Hence, there is no need for additional fire resistant housings which are both heavy in weight and more expensive. Therefore, our BLO-Line® monitors are cost-effective and allow for an easy installation and handling.




BLO-Line® - PRODUCT OF THE YEAR 2024 | Feuertrutz-Award in the category structural fire protection



# BLO-Line® 31.5

## Fire protection according to class A1



**FORTEC INTEGRATED** 

**CERTIFICATION EQUIVALENT CLASS A1 about smoke gas development and fire load**

This monitor is a fire load and smoke gas optimized device. With this certificate confirm compliance with the following limit values to fire behavior and fire load.

Reaction to fire: The flammability and combustibility of the monitor were tested in accordance with DIN EN 13823:2015-02 (reaction to fire tests for building products, excluding floorings, exposed to thermal attack by a single burning item).

The fire test generated results enabling the monitor to be classified within the class A1 (DIN EN 13501-1) in all categories. It should be noted, however, that officially it is not possible to classify monitors under DIN EN 13501-1 as this norm was made for building materials originally.

Fire load performance is dependent upon the screen diagonal measurement as follows:

| Screen size       | Fire load in kWh | Equivalent mass spruce wood in kg |
|-------------------|------------------|-----------------------------------|
| 500x mm (20" D)   | 8,08             | 1,68                              |
| 800 x mm (31.5")  | 13,97            | 2,91                              |
| 1066,8 mm (42.0") | 22,89            | 4,76                              |
| 1384 mm (54.5")   | 26,10            | 5,56                              |
| 1584,9 mm (62.4") | 30,95            | 6,70                              |
| 1818 mm (71.5")   | 41,98            | 9,00                              |

Germsing, 30. October 2019

*R. Bräuer* *M. Keller*

Dipl.-Ing. Ralf Bräuer (MEng) Managing Director  
Officially appointed and registered expert for preventive fire protection by the Chamber of Engineers  
Certified expert for preventive fire protection (member of the IFAI fire Engineering Center)  
Matthias Keller  
Managing Director  
DIN EN 13501-1

stick copy of monitor label

Fördermitglied im FORTEC Integrated is supporting member of Bundesverband Brandschutz-Fachbetriebe e.V.



Please also visit our website: [www.brandschutzmonitore.de](http://www.brandschutzmonitore.de)

# Panel and housing

## BLO-Line® 31.5



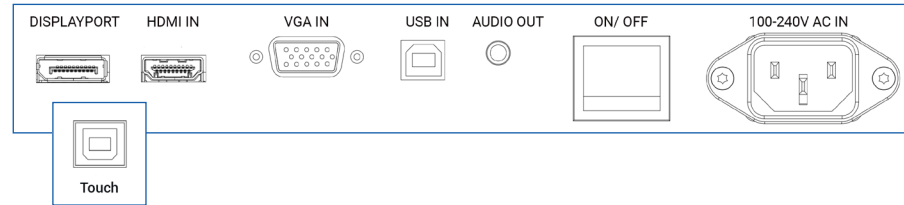
BLO-Line® 31.5 monitor

|   | Measure       | Description   |
|---|---------------|---|
| Panel Diagonal & Pixel class                        | [mm] / [Inch] | 800.1/ 31.5   ISO 9241-307 (pixel error class II)                 |
| Type  |               | BLO-Line monitor with glass and bezel                             |
| Resolution  | [Pixel]       | 1.920 x 1.080 FHD   |
| Luminance (center)                                  | [cd/m²]       | 500   |
| Viewing angle (U/ D/ L/ R)                          | [°]           | 89/ 89/ 89/ 89  |
| Active area (H/V)                                   | [mm]          | 698.40 x 392.85   |
| Backlight & Number of colors                        | [M]           | LED   16.7  |
| Contrast ratio                                      |               | 3000:1  |
| Response time (on/off)                              | [ms]          | 8   |
| Life time back light until reaching half brightness | [h]           | 50.000  |
| Continuous operating time                           | [h] / [d]     | 24/ 7   |
| Mounting  | [mm]          | Wall mount included   |
| Storage temperature                                 | [°C] / [°F]   | -20 ~ 60 / -4 ~ 140   |
| Operating temperature                               | [°C] / [°F]   | 0 ~ 40/ 32 ~ 104  |
| Storage & Operation humidity                        | [%]           | 10 ~ 90 (non condensing)  |
| Panel orientation                                   |               | Landscape and Portrait (option)                                   |
| Location of connectors and OSD buttons              |               | Landscape and portrait mode: backside middle                      |
| Housing   |               | Powdered steel sheet, black RAL 9005                              |
| Glass   |               | Fire protection glass, 7 mm                                       |
| Power supply  | [V]           | AC 110-240/ 50-60 Hz  |
| Weight  | [kg]          | 22.0  |
| Dimension (W x H x D)                               | [mm]          | 752 x 442 x 83  |
| Conformity  |               | CE, FCC Class A, EU-RoHS, A1 according to EN13501-1               |
| Packaging   |               | Single packaging for cargo pallet (max. 3 packages p.p.)          |
| Package Contents                                    |               | Safety instructions, power cable DB-07-607, BLO-Line® certificate |

All figures are typical values. The real values of the panel may vary. The optical characteristics are determined after the panel has been „ON“ for approximately 30 minutes at an ambient temperature of 25° C (77° F).

Life time of the backlight is defined as the time to take until the brightness reduces to 50% of its original value.

# Video PME - VGA, HDMI, DisplayPort



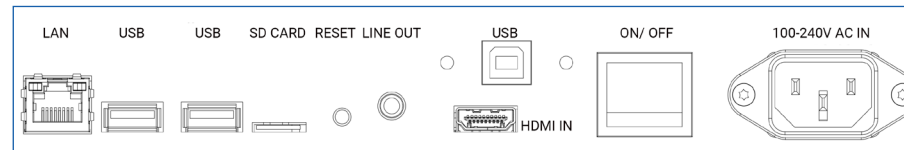
|                          |        |  |
|--------------------------|--------|--|
| Order number             |        | DS-92-058  |
| Interfaces               |        | 1 x VGA, 1 x HDMI, 1 x DisplayPort, 1 x Audio Line-Out, 1 x USB-Remote |
| Power consumption (typ.) | [Watt] | 44   |

# BLO-Line® 31.5



BLO-Line® 31.5 monitor

# VideoPoster - Multimedia Networkplayer

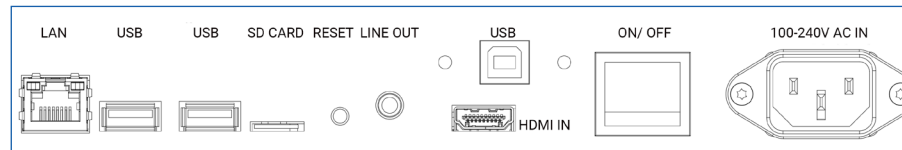


|                          |        |  |
|--------------------------|--------|--|
| Order number             |        | DS-92-123  |
| Interfaces               |        | 1 x LAN, 2 x USB,, 1 x HDMI, 1 x Audio Line-Out, 1 x MicroSD card slot |
| Power consumption (typ.) | [Watt] | 43   |



BLO-Line® 31.5 monitor backside

# WebPoster M3 - Website Player



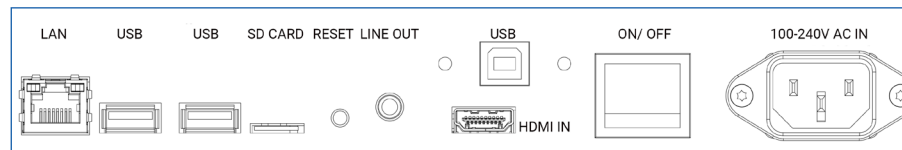
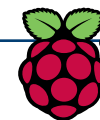
## BLO-Line® 31.5

WebPoster M3 is an industrial FHD network player to show websites. It is a special designed FORTEC Integrated O/S for Artista IOT monitors.

Firmware is compatible with touchscreen applications.

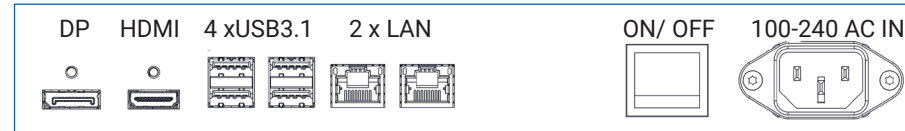
|                          |        |  |
|--------------------------|--------|--|
| Order number             |        | DS-92-221  |
| Interfaces               |        | 1 x LAN, 2 x USB,, 1 x HDMI, 1 x Audio Line-Out, 1 x MicroSD card slot |
| Raspberry® PI            |        | CM3+, CM 4, 32 GB  |
| Power consumption (typ.) | [Watt] | 43   |

# IOT - Raspberry® IoT Controller



|                          |        |  |
|--------------------------|--------|--|
| Order number             |        | DS-92-074  |
| Interfaces               |        | 1 x LAN, 2 x USB,, 1 x HDMI, 1 x Audio Line-Out, 1 x MicroSD card slot |
| Raspberry® PI            |        | CM3+, CM 4, 32 GB  |
| Power consumption (typ.) | [Watt] | 43   |

# PC Intel® - Atom™



|                          |        |   |
|--------------------------|--------|---|
| Order number             |        | DS-92-052   |
| Interfaces               |        | 1 x DP, 1 x HDMI, 2x Ethernet RJ45, 4x USB 3.0  |
| PC                       |        | CPU: Intel® Atom™ x7-E3950 Quad-Core (4x 1.6/2.0 GHz), RAM: 8 GB DDR3L, Storage: min. 128 GB M.2 SATA |
| Fan                      |        | no  |
| Power consumption (typ.) | [Watt] | 55  |

## Options

|                      |           |                                     |
|----------------------|-----------|-------------------------------------|
| Order number         | DS-92-131 | Touch monitor with Prisma Media Eco |
|                      | DS-92-152 | Touch monitor with IQ Atom™         |
|                      | DS-92-153 | Touch monitor with Raspberry® IoT   |
|                      | DS-92-214 | Touch monitor with WebPoster M3     |
| Touch technology     |           | PCAP touch, projected capacitive    |
| Glass                |           | Fire protection glass 6.5 mm        |
| Can be combined with |           | —                                   |

## BLO-Line® 31.5

### Touch integrated



BLO-Line® 31.5 monitor with touch screen

# Options

## BLO-Line® 31.5

| Product                      | Order no. | Product description   |
|------------------------------|-----------|---|
| Extinguishing cartridge      | DS-92-079 | Higher safety in cases of fire for all versions of BLO-Line®                                  |
| BLO-Line® A1, Portrait mode  | AP-01-148 | Information order number if the usage will be in portrait mode, for all versions of BLO-Line® |
| Bezel with cable feedthrough | DS-92-107 | Front bezel with outlet for cable feed BLO-Line® 31.5, to cover the cable connections         |

## Additional

# Accessories

| Product          | Order no. | Product description                 |
|------------------|-----------|-------------------------------------|
| WIN 10 IOT Atom™ | DS-60-899 | Embedded operation system 2019 LTSC |

## Software

Windows 10 IoT Enterprise is a full version of Windows 10 that provides enterprise manageability and security for embedded devices and IoT solutions such as medical devices, industrial automation, measurement systems, and more. It's a binary equivalent of Windows 10 Enterprise, so you can use the same familiar development and management tools as you would on client PCs and laptops. The embedded version of Windows 10 IoT Enterprise is supported by Microsoft for at least 10 years.

Copyright 2024 FORTEC Integrated. Information in the document is subject to change without prior notice.

Our corporate network supports you worldwide with offices in Germany, Austria, Switzerland, Great Britain and the USA.  
For more information please contact:

# Contact

---

## FORTEC GROUP

**FORTEC Elektronik AG** | Augsburg Str. 2b | 82110 Germering  
+49 89 894450-0  
info@fortecag.de | [www.fortecag.de](http://www.fortecag.de)

---

## FORTEC INTEGRATED

**FORTEC Integrated GmbH** | Augsburg Str. 2b | 82110 Germering  
+49 89 894363-0  
info@fortec-integrated.de | [www.fortec-integrated.de](http://www.fortec-integrated.de)

## FORTEC POWER

**AUTRONIC Steuer und Regeltechnik GmbH** | Siemensstraße 17 |  
74343 Sachsenheim  
+49 7147 24-0  
vertrieb@autronic.de | [www.autronic.de](http://www.autronic.de)

**FORTEC Power GmbH** | Lise-Meitner-Straße 3 | 64560 Riedstadt  
+49 6158 8285-0  
weborder@fortec-power.de | [www.fortec-power.de](http://www.fortec-power.de)

## FORTEC CZECH REPUBLIC

**FORTEC Czech Republic s.r.o.** | Přátelství 275 | 330 02 Dýšina  
+42 0377 845878  
info@fortec.cz | [www.fortec.cz](http://www.fortec.cz)

## FORTEC SWITZERLAND

**FORTEC Switzerland AG** | Bahnhofstraße 3 | 5436 Würenlos  
+41 44 7446111  
info@fortec.ch | [www.fortec.ch](http://www.fortec.ch)

## FORTEC UNITED KINGDOM

**FORTEC Technology UK Ltd.** | Osprey House | 1 Osprey Court  
Hinchingsbrooke Business Park | Huntingdon | Cambridgeshire | PE29 6FN  
+44 1480 411600  
info@fortec.uk | [www.fortec.uk](http://www.fortec.uk)

## FORTEC UNITED STATES

**FORTEC US, Corp.** | 87 Raynor Avenue Unit 1 | Ronkonkoma | NY | 11779  
+1 631 5804360  
info@fortec.us | [www.fortec.us](http://www.fortec.us)