4K
BLO-Line®

FORTEC
GROUP

BLO-Line®

Blaze load optimized 4K monitors 54.6 inch — according to class A1

One partner, unlimited technology solutions

Product Features

Designed, developed and made in Germany

BLO-Line® 4K 54.6

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-Line® 4K 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).
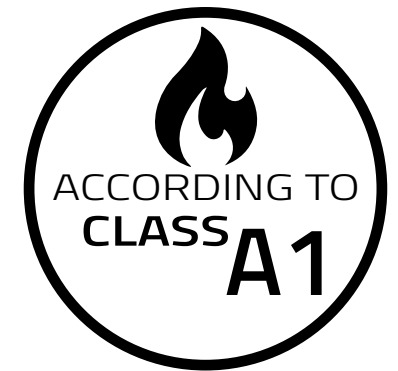
The BLO-Line® 4K will be certified and classified according to fire protection class A1. This means that it complies with the relevant fire protection regulations.
BLO-Line® 4K monitors can also be equipped with an optional extinguishing device or even be designed for a higher IP protection class. This makes our BLO-Line® 4K monitors ideally suited for installation as information systems in public buildings, such as hospitals, universities, schools, airports and other public areas in buildings.
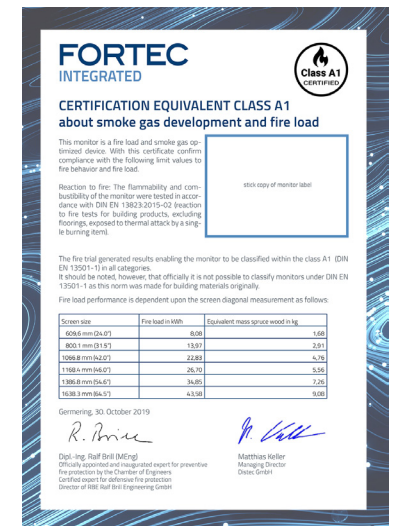
They are available as normal monitors, as an IOT system or as a stand-alone system with an integrated PC. This eliminates the need for additional fireproof enclosures, which are both heavy and more expensive. Therefore, our BLO-Line® 4K monitors are cost-effective and allow for easy installation and handling.

Fire protection according to class A1

ACCORDING TO CLASS A1

Fördermitglied im

bvbf

FORTEC Integrated is supporting member of Bundes-verband Brandschutz-Fachbetriebe e.V.

Please also visit our website: www.brandschutzmonitore.de

FORTEC INTEGRATED

Class A1 CERTIFIED

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 trial 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:

stock copy of monitor label

Screen size	Fire load in kWh	Equivalent mass spruce wood in kg
609.6 mm (24.0")	8.08	1.68
800.1 mm (31.5")	13.97	2.91
1066.8 mm (42.0")	22.83	4.76
1168.4 mm (46.0")	26.70	5.56
1388.8 mm (54.6")	34.85	7.26
1638.3 mm (64.5")	43.58	9.08

Germering, 30. October 2019

Dipl.-Ing. Ralf Brill (MEng)
Officially appointed and inaugurated expert for preventive fire protection by the Chamber of Engineers
Certified expert for defensive fire protection
Director of RBE Ralf Brill Engineering GmbH

Matthias Keller
Managing Director
Distec GmbH

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Panel and housing

BLO-Line® 4K 54.6

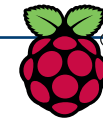|	Measure	Description
Panel Diagonal & Pixel class	[mm] / [Inch]	1381/ 54.6	ISO 9241-307 (pixel error class II)
Type		BLO-Line monitor with glass and bezel
Resolution	[Pixel]	3.840 x 2.160 (4K)
Luminance (center)	[cd/m²]	560
Viewing angle (U/ D/ L/ R)	[°]	89/ 89/ 89/ 89
Active area (H/V)	[mm]	1209.60 x 680.40
Backlight & Number of colors	[M]	LED	1070
Contrast ratio		4000:1
Response time (on/off)	[ms]	8.5
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]	55.0
Dimension (W x H x D)	[mm]	1267 x 738 x 78
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

BLO-Line® 4K 54.6 monitor

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.

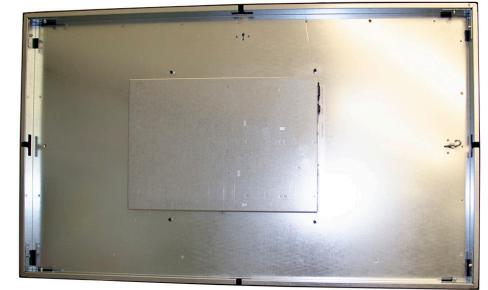# Video PME – VGA, HDMI, DisplayPort

BLO-Line® 4K 54.6

Order number		MO-41-004
Interfaces		1x HDMI 1.4; 1 x HDMI 2.0; 1x DP 1.4; 1x Audio 3,5mm, USB B (Touch)
Power consumption (typ.)	[Watt]	140

IOT – Raspberry® IoT Controller

BLO-Line® 4K 54.6 monitor backside without wall mount

Order number		MO-41-008
Interfaces		2x USB-A; 2x USB-C; 1x Audio 3,5mm; Micro-HDMI (4k, 60Hz); LAN RJ45
Raspberry® PI		CM3+, CM 4, 32 GB
Power consumption (typ.)	[Watt]	130

BLO-Line® 4K 54.6 monitor backside incl. wall mount (darker coloured for demonstration)

Options

Order number	MO-41-005	Touch monitor with Prisma 4K
	MO-41-009	Touch monitor with Raspberry® IoT
Touch technology		PCAP touch, projected capacitive
Glass		Fire protection glass 6.5 mm
Can be combined with		—

Touch integrated

BLO-Line® 4K 54.6 monitor with touch screen

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	MO-41-023	Front bezel with outlet for cable feed BLO-Line® 4K 54.6, to cover the cable connections

Additionals

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.

Contact

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