



HMI & Remote PC Terminals for industrial and hazardous areas – Ex Zone 1 / 2 / 21 / 22

GECMA Components GmbH, Postfach 4146, D-50155 Kerpen




TECHNICAL DATASHEET

CHALLENGER

Remote PC Terminal for hazardous areas - zone 1/2 (Gas), -22* (Dust)

Displays

All the CHALLENGER displays - components of our Remote PC terminal – are especially designed for hazardous areas zone 1/2/22*. Available as Standard / High-Brightness-Display / Performed as intrinsically safe panel mount module all our displays could be easily integrated in our FHP enclosures or in existing enclosures or walls. Supported by our data transmission all CHALLENGER displays visualize the software in a brilliant picture quality in the plant.

Article Code	Product Description	Technical Description
C-E-FMO-15i 	FIELD MONITOR 15" for hazardous areas zone 1/2/22* <ul style="list-style-type: none"> - TFT display as intrinsically safe module - 15 inch screen diagonal - Glass front with an anti-reflective chemical coating - XGA resolution (1024 x 768 pixel) - 16 million colours - Up to 250 cd/m² - Contrast 250:1 (typ.) - Wide angle to view (160°) - Long life CCFL-lights - Covered by aluminium front frame and glass pane 	<ul style="list-style-type: none"> - Panel Mount design - Operating temperature range -10°C to +60°C - Extendable to -30°C to +60°C - Ingress protection IP 66/NEMA 4X from front - ATEX: DMT 00 ATEX E 089 X, II 2G EEx ib IIC T4 - UL/cUL-listed: Class I, Zone 1, AEx ib IIC T4, Ex ib IIC T4, File E 232869 - UL/cUL-listed: Class I, Div. 2, Groups A,B,C,D T4 File E 232869 - GOST-R/GGTN, IECEx, TIIS, NEPSI...certified
C-E-FMO-HB-15i 	FIELD MONITOR 15" HIGH BRIGHTNESS (650cd/m²) for hazardous areas zone 1/2/22* <ul style="list-style-type: none"> - TFT display as intrinsically safe module - 15 inch screen diagonal - Glass front with an anti-reflective chemical coating - XGA resolution (1024 x 768 pixel) - 16 million colours - Up to 650 cd/m² - Contrast 500:1 (typ.) - Wide angle to view (160°) - Long life CCFL-lights - Covered by aluminium front frame and glass pane 	<ul style="list-style-type: none"> - Panel Mount design - Glass front with an anti-reflective chemical coating - Operating temperature range -10°C to +60°C - Extendable to -30°C to +60°C - Ingress protection IP 66/NEMA 4X from front - ATEX: BVS 05 ATEX E 020, II 2G EEx ib IIC T4 - GOST-R/GGTN, IECEx, TIIS, NEPSI...certified
C-E-FMO-TS-15i 	FIELD MONITOR 15" with TOUCH SCREEN for hazardous areas zone 1/2/22* <ul style="list-style-type: none"> - TFT display as intrinsically safe module - 15 inch screen diagonal - Resistive 5-wire touch screen - Can be operated with gloves, stylus or fingers - XGA resolution (1024 x 768 pixel) - 16 million colours - Up to 250 cd/m² - Contrast 250:1 (typ.) - Wide angle to view (160°) - Long life CCFL-lights - Covered by aluminium front frame and glass pane - Foil or glass cover sheet 	<ul style="list-style-type: none"> - Panel Mount design - Operating temperature range -10°C to +60°C - Extendable to -30°C to +60°C - Ingress protection IP 66/NEMA 4X from front - ATEX: TÜV 02 ATEX 1959 II 2G EEx ib IIC T4 - UL/cUL-listed: Class I, Zone 1, AEx ib IIC T4, Ex ib IIC T4, File E 232869 - UL/cUL-listed: Class I, Div. 2, Groups A,B,C,D T4 File E 232869 - GOST-R/GGTN, IECEx, TIIS, NEPSI...certified
C-E-FMO-HB-TS-15i	FIELD MONITOR 15" with HIGH BRIGHTNESS Display as	



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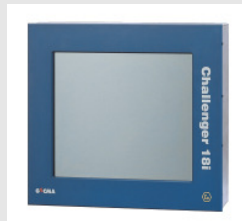
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TOUCH SCREEN for hazardous areas zone 1/2/22*

- High Brightness TFT display as intrinsically safe module
- 15 inch screen diagonal
- Resistive 5-wire touch screen
- Can be operated with gloves, stylus or fingers
- XGA resolution (1024 x 768 pixel)
- 16 million colours
- HIGH BRIGHTNESS 650 cd/m²
- Contrast 250:1 (typ.)
- Wide angle to view (160°)
- Long life CCFL-lights
- Covered by aluminium front frame and glass pane
- Foil or glass cover sheet
- Panel Mount design
- Operating temperature range -10°C to +60°C
- Extendable to -30°C to +60°C
- Ingress protection IP 66/NEMA 4X from front
- ATEX / IECEx certified

C-E-FMO-18i



FIELD MONITOR 19" for hazardous areas zone 1/2/22*

- TFT display as intrinsically safe module
- 19 inch screen diagonal
- Glass front with an anti-reflective chemical coating
- SXGA resolution (1280 x 1024 pixel)
- 16 million colours
- Up to 250 cd/m²
- Contrast 250:1 (typ.)
- Wide angle to view (160°)
- Long life CCFL-lights
- Covered by aluminium front frame and glass pane
- Panel Mount design
- Operating temperature range -10°C to +60°C
- Extendable to -30°C to +60°C
- Ingress protection IP66/NEMA 4X from front
- ATEX: DMT 00 ATEX E 089 X, II 2G EEx ib IIC T4
- UL/cUL-listed: Class I, Zone 1, AEx ib IIC T4, Ex ib IIC T4, File E 232869
- UL/cUL-listed: Class I, Div. 2, Groups A,B,C,D T4 File E 232869
- GOST-R/GGTN, IECEx, TIIS, NEPSI...certified

C-E-FMO-HB-18i



FIELD MONITOR 19" HIGH BRIGHTNESS (650cd/m²) for hazardous areas zone 1/2/22*

- TFT display as intrinsically safe module
- 19 inch screen diagonal
- SXGA resolution (1280 x 1024 pixel)
- 16 million colours
- Up to 650 cd/m²
- Contrast 500:1 (typ.)
- Wide angle to view (160°)
- Long life CCFL-lights
- Covered by aluminium front frame and glass pane
- Glass front with an anti-reflective chemical coating
- Panel Mount design
- Operating temperature range -10°C to +60°C
- Extendable to -30°C to +60°C
- Ingress protection IP 66/NEMA 4X from front
- ATEX: DMT 00 ATEX E 089 X, II 2G EEx ib IIC T4
- UL/cUL-listed: Class I, Zone 1, AEx ib IIC T4, Ex ib IIC T4, File E 232869
- UL/cUL-listed: Class I, Div. 2, Groups A,B,C,D T4 File E 232869
- GOST-R/GGTN, IECEx, TIIS, NEPSI...certified

C-E-FMO-TS-18i



FIELD MONITOR 19" with HIGH BRIGHTNESS Display as TOUCH SCREEN for hazardous areas zone 1/2/22*

- High Brightness TFT display as intrinsically safe module
- 19 inch screen diagonal
- Resistive 5-wire touch screen
- Can be operated with gloves, stylus or fingers
- SXGA resolution (1280 x 1024 pixel)
- 16 million colours
- Up to 250 cd/m²
- Contrast 250:1 (typ.)
- Wide angle to view (160°)
- Long life CCFL-lights
- Covered by aluminium front frame and glass pane
- Foil or glass cover sheet
- Panel Mount design
- Operating temperature range -10°C to +60°C
- Extendable to -30°C to +60°C
- Ingress protection IP 66/NEMA 4X from front
- ATEX: TÜV 02 ATEX 1959 II 2G EEx ib IIC T4
- UL/cUL-listed: Class I, Zone 1, AEx ib IIC T4, Ex ib IIC T4, File E 232869
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- Extendable to -30°C to +60°C
- Ingress protection IP 66/NEMA 4X from front
- ATEX / IECEx, certified

* if used together with for dust areas certified FHP enclosures

Technical data sheets are subject to modifications and amendments / No liability for misprints and errors.