technical datasheet

# **CHALLENGER 22i**

22" Remote PC Terminals for hazardous areas

- Client specific modular system
- Intrinsically safe remote terminals certified for use in hazardous area Zone 1, 2 & 22
- Designed for roughest environment
- Highest dependability
- Savings of software licence costs by cascading several CHALLENGER remote terminals to one PC



The Challenger 22i remote terminal is ideally suited to surviving the harsh environments typically found in Pharmaceutical, Chemical, Petro Chemical, Oil & Gas and Off-shore manufacturing. In addition to GECMA's Explorer Panel PC the Challenger Remote Terminal restricts itself to the minimal needed components to remote operate any PC or workstation from hazardous area, independent from the operating system used. This gives the lowest possible probability of default and down times and highest flexibility.

Designed for rough environment the Challenger 22i remote terminals are rugged and durable by the deliberate selection of high-quality materials, stainless steel housing, lowest power dissipation and use of exclusively passive mechanical components like passive cooling.

The flexible modular concept consisting of application specific components allows the Challenger 22i remote terminal to be used under the strictest of hygienic conditions as well as in aggressive production environments.

Constructed as panel mounting module the Challenger 22i remote terminal can be integrated easily into our standard enclosure, a huge range of special enclosures, as well as existing enclosures, walls and cabinets.

The TFT displays of the Challenger 22i is available with touch-screen display options and a wide range of requirement dependent input devices to perfectly support local plant conditions, e.g. Keyboard, Trackball, Joystick, Touchpad, Mouse and further variations in material, functionality and customization.

The large 22" display provides high definition, crystal-clear images and excellent contrast. The extra-wide viewing angle provides comfort and flexibilityin the choice of viewing position.

The Challenger 22i's data transmission between safe and hazardous area is a proprietary and intrinsic safe system and therefore guaranties maximum safety and maintainability without down times on site.

An additional autonomous communication channel allows to interface further equipment, e.g. serial devices like scanner or cameras.

Challenger 22i Rev3 140514



## **SPECIFICATION**

#### **ELECTRICAL**

Screen size:	22 inch (55cm) - across diagonal
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Screen type:	LCD thin film technology (TFT) with LED backlight
Resolution:	1680 x 1050 pixels (WSGA+) lower resolutions are interpolated
Number of colours:	16.7 million
Brightness:	Up to 250 cd/m <sup>2</sup>
Contrast ratio:	1000:1 typical
Viewing angle:	160° typ. for CR ≥ 10
Touch screen technology (optional):	Resistive 5-wire touch screen foil or glass cover sheet
Power supply:	100 - 240VAC 50/60Hz
Input power:	Transmission unit max. 20W, Challenger 22i max. 70W
Transmission unit:	Proprietary intrinsically safe KVM transmission
Keyboard/Mouse:	PS/2/USB
Serial transmission line (optional):	Intrinsically safe RS232

#### **ENVIRONMENTAL**

Temperature	-10°C - +50°C -30°C - +50°C (optional)
Ingress protection	IP66 / NEMA 4X from front when correct mounted into a IP66 / NEMA 4X approved housing. IP20 from rear.

## **MECHANICAL**

Housing material:	Stainless Steel V2A, EN std 1.4301, SAE grade 304 V4A, EN std 1.4404, SAE grade 316L (optional) Electro polishing (optional)
Weight	Approx. 25kg (55lbs)
Dimensions (mm)	(W x H x D) 615.6 x 436.6 x 115 mm

## **CERTIFICATION**

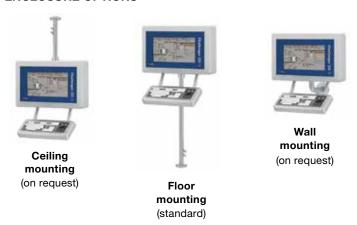
Authority	ATEX/IECEx
Standards	94/9/EG, ATEX Directive EN60079-0:2009 EN60079-11:2007
	2004/108/EG, EMC - Directive EN61326-1:2006
	2006/95/EG, Low Voltage Directive EN61010-1:2010
Approved for	€∑II2G Ex ib IIC T4 Gb
Certificate No.	DMT 00 ATEX E 089 X IECEx BVS 12.0011

#### **ORDERING INFORMATION**

The Challenger 22i displays are available with equipment options as defined below. For any optional features please contact our sales team. GEC-CE 2 15 S - A E M F 000 Part No.: Screen size = 15, 18 or 22 Enclosure style:  $\mathbf{F} = \text{Floor mounting on}$ 1260mm pedestal Screen type: **Z** = No enclosure# S = Standard, No touch  $\mathbf{F} = \text{Standard}$ , Foil touch Pointing device: Input power:  $\mathbf{J} = \mathsf{Joystick}$  $\boldsymbol{A}=AC,\,\boldsymbol{D}=DC$  $\mathbf{M} = \mathsf{Mouse}$  $\mathbf{P} = \text{Touch pad}$ Keyboard: T = Trackball ${\bf Z} = {\sf No~pointing~device^*}$  $\mathbf{E} = \text{English}$  $\boldsymbol{F} = \text{French}$  $\mathbf{G} = German$ **Z** = No keyboard\* Standard system is AC power. \* Note that option "Z" is no pointing device and no keyboard
# Note that option "Z" cannot be combined with option\* no pointing device and

## **ENCLOSURE OPTIONS**

no keyboard = Order as display unit



Further enclosure options on request

The given data is only intended as a product description and should not be regarded as a legal warranty of properties or guarantee. In the interest of further technical developments, we reserve the right to make design changes.

