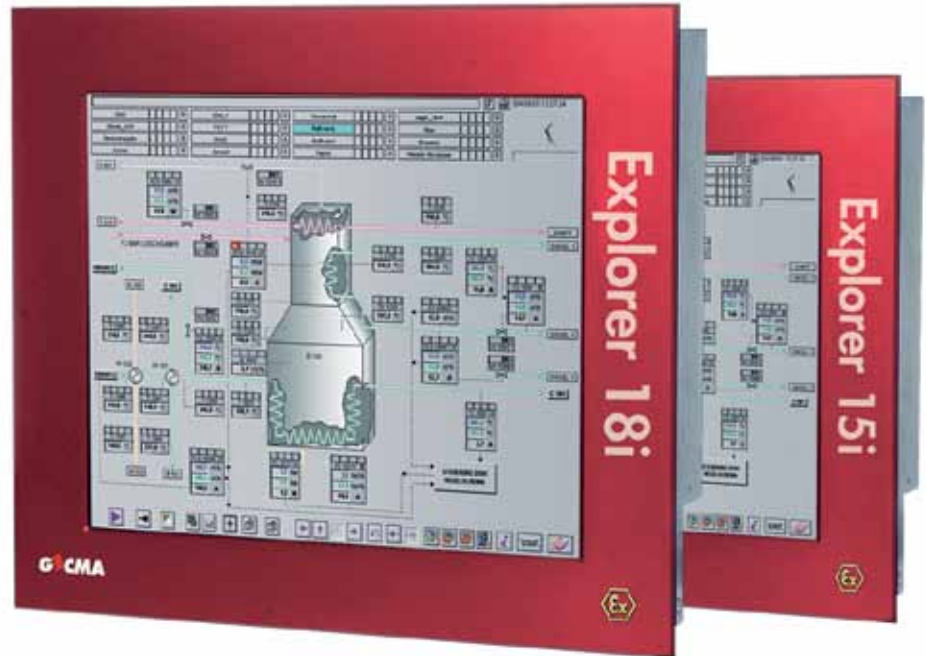# GECMA

technical datasheet

EXPLORER 15i / 18i 2nd Generation

15" and 19" panel PCs for hazardous areas

- Client specific modular system

- Ex Zone 1/2, Zone 21/22

- Designed for roughest environment

- Highest dependability

- Windows 7 - 32 bit Ultimate

- Non-wearing SSD

- Intel Atom 1.6 GHz

- 2GB RAM

The Explorer range of hazardous-area panel PCs 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 Challenger Remote Terminals the Explorer Panel PC range has an in-built PC to integrate all essential functionality.

Constructed as intrinsically safe panel mounting modules and certified for Ex Zone 1/2 (Gas), Zone 21/22 (Dust) the Explorer panel PCs can be integrated easily into our standard enclosure, a huge range of special enclosures, as well as existing enclosures, walls and cabinets.

Industry standard operating systems WIN 7 32-bit ultimate, or optional WIN XP, will ensure integration into existing IT environments.

Designed for rough environment the Explorer panel PCs are rugged and durable by stainless steel housing, lowest power dissipation and use of exlusively passive mechanical components like passive cooling and non wearing-SSD.

The TFT displays of the Explorer models are available with touch-screen or high brightness options and a wide range of communication ports, like USB, RS232, RS485 and RS422, to interface further electrical equipment or for the functionality of WLAN or Bluetooth.

Requirement dependent operating devices will perfectly support local plant conditions. Customer can choose from a range of operating devices like Keyboard, Trackball, Joystick, Touchpad, Mouse and further variations in material, functionality and customization.

With our EFU converter we have created the possibility to realize various ways of data transmission. The most important ways are: Ethernet via fibre optic/Redundant Ethernet /Redundant Ethernet via fibre optic, etc. Further options can be made available on request.

The flexible modular concept consisting of intrinsically safe components and the deliberate selection of high-quality materials allows the Explorer panel PCs to be used under the strictest of hygienic conditions as well as in aggressive production environments. Even under temperature conditions of -20°C to +45°C there is no functional impairment.

COOPER Crouse-Hinds

SPECIFICATION

ELECTRICAL

|	
Processor:	Intel® ATOM™ N270, 1.6 GHz
Chipset:	Intel® 945GSE, 533 MHz FSB
DRAM:	2048 MB (DDR2 533 SODIMM)
Cache:	512K - 2nd Level
Video:	Intel Intel® GMA950, Supports DX 9.0c
Display:	**Explorer 15i:** 1024 x 768, 16 million colours, optional high brightness **Explorer 18i:** 1280 x 1024, 16 million colours, optional high brightness
Touch screen technology (optional):	Resistive 5-wire touch screen foil or glass cover sheet
Mass storage:	64 GB SSD or optional up to 4 x CF Cards (8 GB /16 GB)
Operating system:	Windows 7, 32-bit, Ultimate Edition / Windows XP (optional)
Power supply:	AC 100-240V AC, 50/60Hz, 120W (max.) optional DC 20-30V DC, 120W (max.)
Power supply for external devices:	Intrinsic safety ia Uo ≤ 12.5 V, Io ≤ 541 mA optional Intrinsic safety ia Uo ≤ 5.4 V, Io ≤ 420 mA
Input Power:	75W (typ.) / 120W (max.)
Ethernet:	10/100Base-T Intel® 82562V, IEEE 802.3
Serial (RS232 – 16550 compatible):	2 x Ex i (RXD, TXD, RTS, CTS) 1 x Ex e (RXD, TXD)
USB:	4 x USB Ex i plus 1 x USB Ex e
RS485 Ex e: Optional	Half Duplex, 2-wire RS485, up to 115.2K, auto TX enable, RLine=120Ω †
RS422 Ex e: Optional	4-wire (default) or auto TX, up to 115.2K † *The RS232 Ex e port may be replaced by either of the options marked*

ENVIRONMENTAL

Temperature	Operating: -20°C to +45°C Storage: -20°C to +60°C (10-90% RH, non-condensing)
Ingress protection	Front IP66 / NEMA 4X (when mounted correctly)

MECHANICAL

Housing material:	Stainless steel
Weight	**Explorer 15i:** approx. 20kg (approx. 44lbs) **Explorer 18i:** approx. 25kg (approx. 55lbs)
Dimensions (mm)	**Explorer 15i:** 429 (W) x 340.5 (H) x 135 (D*) **Explorer 18i:** 505.9 (W) x 425.7 (H) x 135 (D*) * *depth behind front mounting surface*

CERTIFICATION

Authority	ATEX, TIIS, FM in progress
Standards	EN 61241-1:2004 EN 61241-0:2006 EN 60079-0:2008 EN 60079-18:2004 EN 60079-7:2007 EN 60079-11:2007
Approved for	**Zone 1** ⟨Ex⟩ II 2G Ex e mb [ia] IIC T4 Ta: -20°C to +50°C (-4°F to 122°F) **Zone 21** ⟨Ex⟩ II 2D Ex tD A21 IP6X T120°C Ta: -20°C to +50°C (-4°F to 122°F)
Certificate No.	IBExU 05 ATEX 1186 X

ORDERING INFORMATION

Two models are available - **Explorer 15i** or **Explorer 18i** - with a range of equipment options as defined below. For any optional features please contact our sales team.

Part No.:   GEC-EE2 [15] [S] -A [E] [M] [F] 000

Screen size = **15** or **18**

Screen type:
S = Standard, no touch
F = Standard, foil touch
H = High brightness, no touch
I = High brightness, foil touch

Keyboard:
E = English
F = French
G = German
Z = No keyboard*

Enclosure style:
F = Floor mounting on 1260mm pedestal
Z = No enclosure#

Pointing device:
J = Joystick
M = Mouse
P = Touch pad
T = Trackball
Z = No pointing device*

Standard system is AC power / 12V output / RS232 serial port.

* Note that option "**Z**" is no pointing device and no keyboard

Note that option "**Z**" cannot be combined with option* no pointing device and no keyboard = Order as display unit

STANDARD ENCLOSURES

Ceiling mounting   **Floor mounting**   **Wall mounting**

Special enclosure options on request