



CHALLENGER 22i Upgrade Kit

Remote PC Terminals
For modern Operation and Visualization on site
in hazardous areas Zone 1 / 2

COOPER Crouse-Hinds



Upgrade Kit

Optional



LED Display

- Intrinsically safe panel-mount module
- Ingress protection IP66 from front / NEMA 4x
- 22" screen diagonal (up to WSXGA)
- Capable of displaying more than 16 million colors
- Protection class II 2G EEx ib IIC T4
- ATEX/IECEX



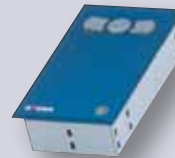
OPTIONAL TOUCH SCREEN Display

- Touch Screen as foil or glass version
- Resistive touch technology
- 5-wire technology
- Can be operated with gloves, pen and fingers
- Connection: RS 232 serial interface
- Protection class II 2G EEx ib IIC T4
- ATEX/IECEX



Keyboard

- Intrinsically safe panel-mount module
- Ingress protection IP66 / NEMA 4X from front
- Foil protected short stroke keyboard
- 105 keys, IBM* compatible
- Standard layouts: German, English, French
- More than 30 languages on request
- Special layouts on request
- Polyesterfoil printed from behind - resistant against many solvents
- Protection class Ex II 2G Ex ib IIC T4
Protection class DUST: Ex II 2D Ex tD A21 IP 6X T 120°C
- ATEX/UL/C-UL/TIIS/IECEX/NEPSI...



Mouse

- Intrinsically safe panel-mount module
- Ingress protection IP66 from front / NEMA 4X
- 4-step pressure-sensitive mouse guidance
- 2 pushbuttons
- Protection class II 2G EEx ib IIC T4
- ATEX/UL/C-UL/TIIS/IECEX/NEPSI...



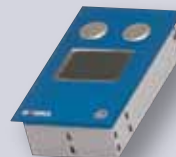
Trackball

- Intrinsically safe panel-mount module
- Ingress protection IP65 from front
- 55 mm ball
- 2 pushbuttons
- Protection class II 2G EEx ib IIC T4
- ATEX/UL/C-UL/TIIS/IECEX/NEPSI...



Joystick

- Intrinsically safe panel-mount module
- Ingress protection IP66 from front / NEMA 4X
- High-precision mouse guidance
- Wearless up to 15 million actuations
- Extremely low-maintenance
- 2 pushbuttons, optionally 3 pushbuttons
- Button-in-joystick function optionally
- Protection class GAS: II 2G EEx ia IIC T4
- ATEX/TIIS/IECEX/NEPSI...



Touch Pad

- Intrinsically safe panel-mount module
- Ingress protection IP 66 from front/ NEMA 4X
- Special resistive foil
- High-definition resolution - up to 200dpi
- 2 pushbuttons
- Can be operated with gloves, pen and fingers
- Protection class GAS: II 2G EEx ia IIC T4
Protection class DUST: Ex II 3D T 60°C IP 6X
- ATEX/TIIS/IECEX/NEPSI...



Card Reader

- Intrinsically safe panel-mount module
- Ingress protection IP66 from front /NEMA 4X
- Non-contact identification
- Mifare protocol as standard (others on request)
- Suitable for the majority of company ID's
- Connection: RS 232 serial interface
- Protection class II 2G EEx ib IIC T4
- ATEX/UL/C-UL/TIIS/IECEX/NEPSI...

CHALLENGER 22i Upgrade Kit

CHALLENGER 22i Remote PC-Terminal



The Remote Operator Station “Challenger”, with over 15.000 units installed in hazardous locations worldwide, is the most successful product of its kind. Existing customers can upgrade to a 22” wide screen solution that allows the user to keep the existing supporting infrastructure in place. The upgrade kit is designed for users who are migrating to a new Process Control System that offers a higher resolution and demands a bigger screen to display more information without the need to replace the existing visualization solution in the field.

Users can leave their existing installation as is and only need to unplug the data connectors, dismount the display housing, replace it with the new 22” display housing from the upgrade kit and reconnect the connectors in the housing to be ready to go. The upgrade kit is fully backward compatible to the original system and will meet the specifications for temperature range, hazardous area and Ingress Protection rating of the existing challenger solution. The 22” display offers a resolution of 1680 x 1050 pixels in a picture ratio of 16:10 on a true 22 inch screen and is available with or without Touch Screen functionality.

Gecma also offers a wide variety of special, customized housings tailored to applications in hazardous areas where space is limited or where various control elements must be integrated into the visualization solution.

Gecma – Pioneers in HMI

Intrinsically safe Remote PC terminals for hazardous areas Zone 1 / Zone 2
Certified by ATEX, IECEx

Enclosures

FHP STANDARD ENCLOSURE



- Hygienic, ergonomic Field Desk Enclosure to house the Display, Keyboard, Mouse or Trackball, Card Reader
- Keyboard inclined by 30°
- Protection system IP 66 / NEMA 4X
- Stainless Steel 1.4301 (1.4404 / 316L opt.)
- Polished to 240 granulation



Wall mounting



Floor mounting



Ceiling mounting

*Keyboard housing and mounting pipe are optional and not required for upgrade kit

Interfaces



RS 232 Interface

- Fully duplex-capable RS 232 Interface
- Intrinsically safe model or industry model including separate data cable for the connection of all RS 232-compatible equipment
- Protection class:
Transmission unit: II 2G EEx ib IIC T4
Receiving unit: II (2)G [EEx ib] IIC
- ATEX, UL, C-UL, TIS ... certified

SPECIAL ENCLOSURES



VHH



VH



DH



DTH



SH 1



SH 2



SH 3



SH 4



SH 5



SH 6



SH 7



SH 8



SH 9



SH 10



SH 12



SH 15

Options and Accessories



Key Switch SW2

- Key switch integrated into the Rack 42 / Rack 84
- To lock Keyboard / Mouse / Trackball on the CHALLENGER or to lock the control room operation



Key Switch SW1

- Key Switch for locking the Keyboard / Mouse / Trackball on the CHALLENGER
- Integrated in the CHALLENGER enclosure
- Ingress protection IP 67 from front / NEMA 4X



Emergency Stop Button

- Emergency Stop Button to turn off individual connections (local connection)
- Ingress protection IP 65 from front
- Protection class II 2G EEx de IIC T6

CHALLENGER 22i Remote PC-Terminal

BENEFITS

- Intrinsically safe certified components for operation and visualization
- Modular configuration
- Trouble-free PC hardware changes and software updates
- Ambient Temperature -10°C to +50°C
- Low installation costs
- Excellent picture quality
- Savings of software costs by cascading up to 4 CHALLENGER terminals to one PC
- Upgrade kit also available for industrial version

APPLICATIONS



PHARMACEUTICAL
INDUSTRY



CHEMICAL
INDUSTRY



OIL & GAS



AUTOMOBILE
PRODUCTION



WASTE WATER
TREATMENT PLANT



COAL FIRED
POWER PLANT



INCINERATION
PLANT



OTHER
PROCESSES

CERTIFICATES



ATEX



IEEX

tested by:



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