



OESTERLE
GMBH



GLOBAL EXTECHNOLOGY

IPC-EX

Industry-standard visualization of processes in chemical, pharmaceutical and petrochemical plants
PC operator terminals for Zones 1 and 2





AXENA PC front end

IPC-EX – the PC Operator Station

Optimized operation, control and monitoring of processes in the hazardous area

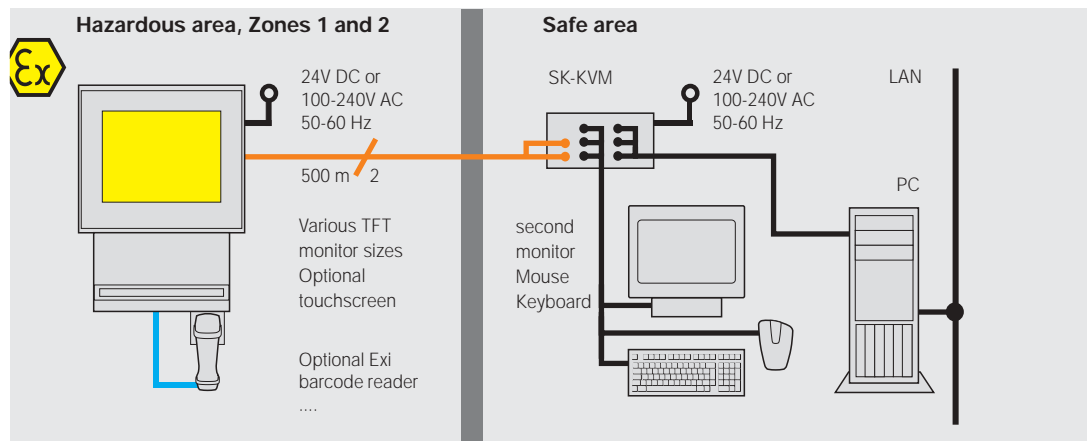
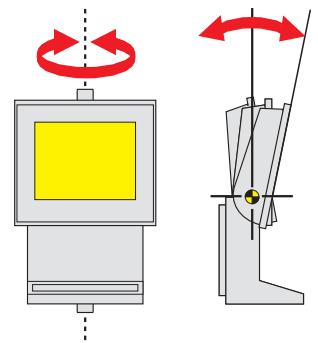
PC operator stations for Zones 1 and 2 with a choice of several different stainless steel case variants designed to IP 65 and high-contrast TFT displays for industry-standard visualization of processes.

With iPC systems from EXTEC, the PC is installed in the safe area, often several hundred metres away from the actual operator terminal in the hazardous area. This terminal consists of an Ex-approved display, keyboard and mouse, connected together by a two-wire fibre optic cable.

A whole range of stainless steel case designs suitable for pharmaceutical applications (AXENA, ORTRA, LETO) are available with 15", 18" and 21" monitors. All the systems are also offered as (non-Ex-protected) variants.

The advantages

- ▶ Several different product series available (wall, bracket and floor mounting variants). The monitor can be swivelled and tilted for optimum ergonomics
- ▶ Any IBM-compatible PC can be used
- ▶ Any PC operating system can be used (Windows, UNIX, MS-DOS etc.)
- ▶ Connects to the existing standard keyboard, video and mouse Ports on your PC, so that no additional software need be installed
- ▶ PC hardware can be updated or serviced at any time because it is Outside the hazardous area
- ▶ Data can be transferred via a two-wire fibre optic cable without any noise whatsoever (EMC), potential-free and over distances of up to 500 m. Potential-free transmission on optical fibres means that no Ex components need be installed in the safe area (simplifies the design and Installation of the cabinet in the safe area)
- ▶ Low-cost, two-wire 50/125 µm glass fibre cable with SC plug connectors in line with Network and fieldbus standards
- ▶ Bright, high-contrast LCD monitors with 15", 18" or 21" screen. The TFT monitors have a very large reading angle and are capable of representing any resolution as a glare-suppressed full frame (DOS, 640 x 480 to 1600 x 1200 pixels)
- ▶ Membrane keyboard with short-travel keys in various national layouts and PS/2 mouse. Alternatively available with a touchpad or a 50 mm trackball
- ▶ Compact SK-KVM line driver as a PC interface in the safe area
- ▶ Second keyboard, monitor and mouse can be connected to the line driver in the safe area
- ▶ Several Ex systems can be connected to a single PC (cascading)
- ▶ Variants for 100 - 240 V AC or 24 V DC power supply
- ▶ Optional touchscreen in the hazardous area
- ▶ Optional Exi barcode reader in the hazardous area
- ▶ Optional switch for selecting operator terminals
- ▶ Optional video camera input
- ▶ Optional Exi identification system
- ▶ Optional mobile systems





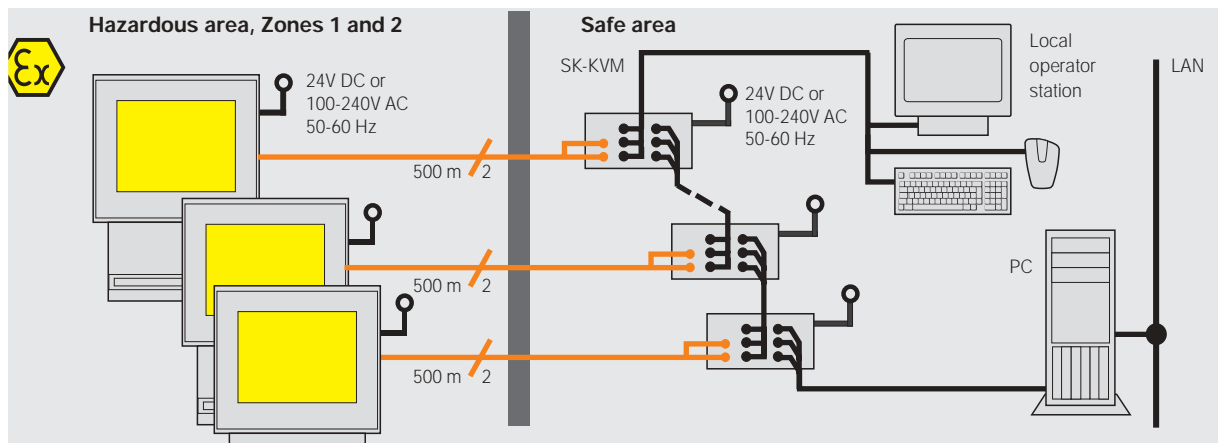
AXENA PC front end

- ▶ 15", 18" or 21" TFT monitor with stainless steel front panel, optional touchscreen for 15" and 18"
- ▶ Stainless steel case (1.4301), degree of protection IP 65
- ▶ AXENA with tiltable monitor for wall, Floor or ceiling mounting
- ▶ Ex short-travel keyboard (German, US international, French, Swedish) with 51 mm trackball, with touchpad or without a mouse
- ▶ Exe terminal compartment, monitor adjustment with on-screen menu (OSD)
- ▶ Two-wire fibre optic cable for transmission distances up to 500 m, optional plug connector for mobile systems
- ▶ Supply voltage in the hazardous area: 24 V DC, optionally 100 - 240 V AC / 50 - 60 Hz
- ▶ Optional serial Exi port, e.g. for Exi barcode reader
- ▶ Ex hand-held barcode readers available as accessories: EXDL 910, EXDLL 6110 (please refer to our Web site: www.extec.de for a description of SCANEX barcode readers)

IPC-EX



System configuration: iPC cascade in the hazardous area





AXENA PC Operator Station

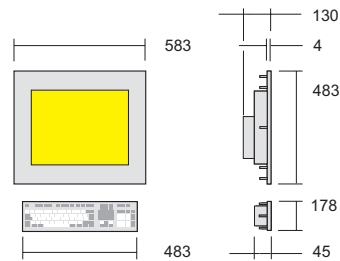
IPC-EX - the case family

Designed to satisfy tough ergonomic requirements
Optimized for a variety of applications

IPC-EX. Choose between several different stainless steel case variants (panel or wall mounting with swivel-type stand or bracket). Mature solutions for maximum operating convenience.

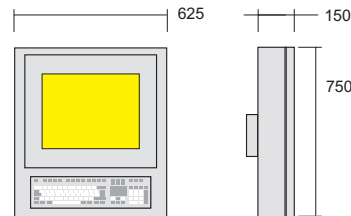
REX

Panel-mounting system, suitable for installation on any wall or in any cabinet. Front panel: IP 65. 15", 18" or 21" TFT monitor and several keyboard variants.



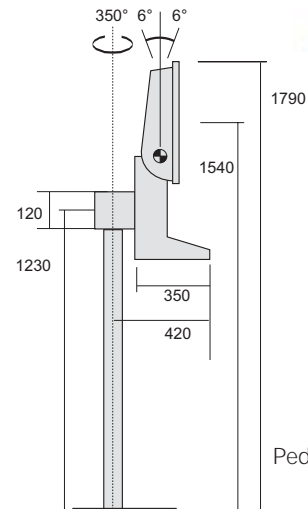
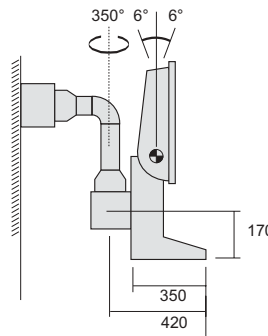
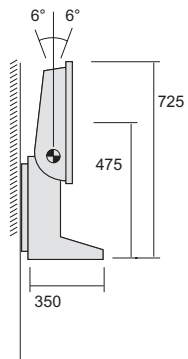
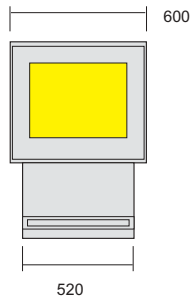
LETO

Compact solution made of stainless steel (1.4301) for simple wall mounting, designed to IP 65. 15", 18" or 21" TFT monitor and several keyboard variants. Optional bracket and floor-mounting Variants.



AXENA

Attractively designed system solution with tiltable monitor that satisfies even the most stringent ergonomic requirements, suitable for wall, floor or ceiling mounting. Stainless steel (1.4301) case with 15", 18" or 21" TFT monitor and several keyboard variants.



Wall-mounting case

Bracket

Pedestal





Exi keyboard

AXENA with 15", 18" or 21" monitor

iPC-EX monitors

Technical data

EXVID-... 15", 18,1 and 21,3" monitors

	EXVID-15XC 15" Monitor	EXVID-18SXC 18.1" Monitor	EXVID-21UXC 21.3" Monitor
Screen diagonal	15.0"	18.1"	21.3"
Display type	TFT, LCD	TFT, LCD	TFT, LCD
Type of protection	II 2 G EEx qe[ib] IIC T4		
Ex approval	IBEXU 01 ATEX 1099		
Degree of protection (front)	IP65	IP65	IP65
Touchscreen (optional)	Resistive	Resistive	--
Display resolution	1024x768 pixels	1280x1024 pixels	1600x1200 pixels
Displayable resolutions	All resolutions from 650x480 pixels (VGA) to 1600x1200 pixels (UXGA)		
Colours	High Color (16 bit)	High Color (16 Bit)	High Color (16 Bit)
Refresh rate	75 Hz	75 Hz	75 Hz
Brightness	200 cd/mm ²	270 cd/mm ²	250 cd/mm ²
Contrast	300:1	400:1	300:1
Service life of backlighting	30,000 h	30,000 h	30,000 h
Glare suppression:			
- Chemically etched glass	Standard	Standard	Standard
- Clear glass	Optional	Optional	Optional
Data transmission	2 x optical fibre, digital	2 x optical fibre, digital	2 x optical fibre, digital
Peripheral ports	1 x Exi serial, 1 x Exi touchscreen, 1 x PS/2 Mouse, 1 x Keyboard		
Supply voltage	24 V DC or 100-240 V DC, 50 – 60 Hz		
Current input	DC 1.7/2	DC 2.5/3	DC 3/3.5
- typ./max (A)	AC 0.17/0.4	AC 0.25/0.6	AC 0.3/0.7
Operating temperature	0°C... + 40°C	0°C... + 40°C	0°C... + 40°C
Front panel	stain less Steel (1.4301)	stain less Steel (1.4301)	stain less Steel (1.4301)
Weight	Approx 35kg	Approx 37kg	Approx 40kg
Dimensions (WxHxD)	583x483x115 mm	583x484x132 mm	583x483x145 mm
Cutout dimensions (WxH)	534 x 404 mm	534 x 404 mm	534 x 404 mm

EXTA-K... Exi keyboards

Technical data

EXTA membrane keyboards
With touchpad
With trackball
Without mouse

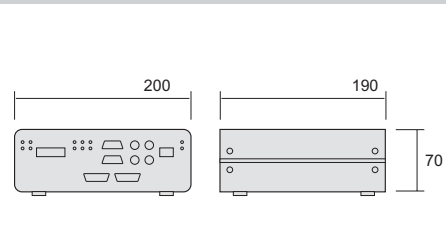


EXTA-K1	Exi keyboard without mouse
EXTA-K3	Exi keyboard with touchpad, 60x50 mm surface Capacitive, Microsoft Mouse-compatible, PS/2
EXTA-K4	Exi keyboard with trackball, 51 mm diameter Phenol resin, Microsoft Mouse-compatible, PS/2
Type of protection	EEx ib IIC T4, DMT 01 ATEX E177
Degree of protection	IP 65 (front)
Dimensions (WxHxD)	482.6 x 177.8 x 45 mm, weight 1.2 Kg
Cutout dimensions (WxH)	450 x 150 mm
Key type	105 short-travel keys, approx. 3 million operations
Front panel	Industry-standard polyester foil on aluminium base
National layouts	German (QWERTZ), US international (QWERTY), French (AZERTY), Swedish
Interface	PS/2 PC-compatible, Exi
Power supply	Via iPC-Ex monitor
Operating temperature	0 °C...50 °C



iPC-EX components

EXTEC products and services
Innovative and powerful

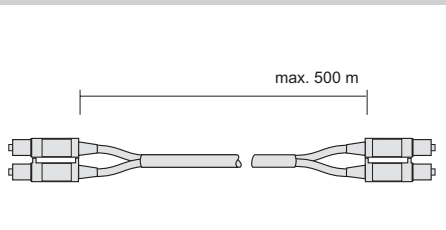


SK-KVM line driver for installation in the safe area close to the PC. Connectors for PS/2 mouse, PS/2 keyboard and standard video output to the PC and second operator station.

Line driver SK-KVM

Degree of protection	IP20
Supply voltage	24V DC, +/- 20%, 100- 230V AC 50-60Hz from power supply (enclosed in AC version)
Case design (W x H x D)	Aluminium desk-type case, 200x70x 190 mm
Options:	19" bezel (2 height modules, 84 depth modules) for installation in a switch cabinet

- ▶ iPC-EX
- ▶ Exi graphics terminals
- ▶ text terminals (4 x 20 characters)
- ▶ Exi text displays (4 x 20 characters)
- ▶ Exi keyboards
- ▶ Exi weighing terminals (W&M approved)
- ▶ Exi load cell amplifier unit
- ▶ Exi ASCII keyboards
- ▶ Exi barcode data acquisition systems
- ▶ Exp printers
- ▶ Configurations for complete filling and metering stations
- ▶ Customizable software that adapts to any existing system (PLC, PC, PCS etc.)



Two-wire glass fibre cable for transmitting video, keyboard, mouse, touch-screen and serial PC data.

F.O. data transmission cable DATL-LWL4-2

Fibre optic cable type	Glass fibre 50/125 µm, two-wire
Plug connector	SC
Advantages	Absolutely noise-free (EMC), potential-free, easy to lay
Transmission distance	Up to 500 m

- ▶ EXTEC explosion protection technology
Electrical equipment, controls and apparatus components
Production and sales
- ▶ EXTEC electronic product development
Development and production of electronic equipment, microprocessor systems, hardware and software
- ▶ ATEX
EXTEC quality system
Based on the requirements of EC Directive 94/9/EC.

▶ CE 0123



Ex barcode reader systems EXDL 910, EXDLL 6110, EX-NANO 70A

For direct connection of Exi hand-held barcode readers, radio scanners and miniature scanners.

Please refer to our Web site: www.extec.de for a description of SCANEX barcode readers



ON TOP
www.extec.de

