

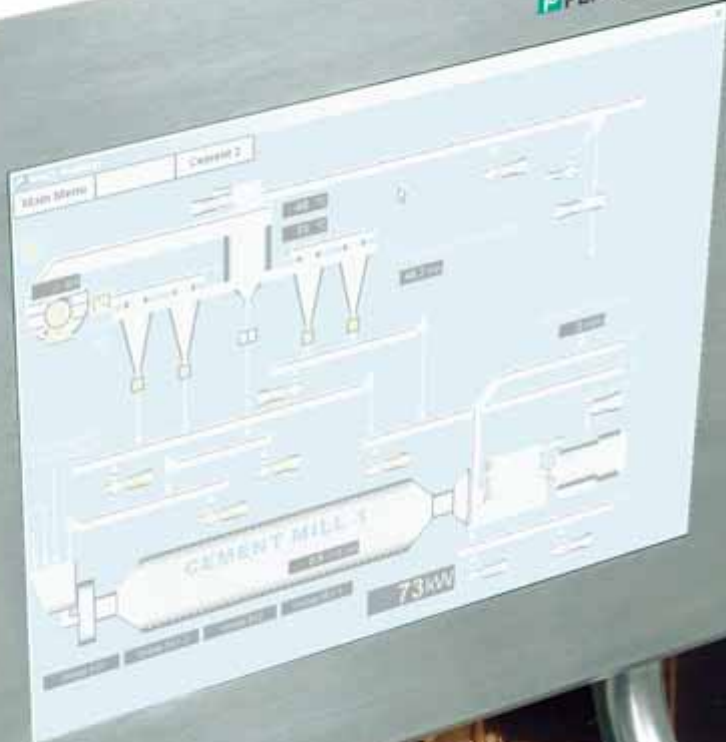


VisuNet

NETWORK-BASED HMI SOLUTIONS



PEPPERL+FUCHS



VisuNet is the first HMI system solution for the process industry that uses complete Ethernet TCP/IP network structures and completely eliminates proprietary communication methods. Ethernet-based networks in automation technology can also be used for PC-based visualization in the process environment.

VisuNet can be used directly in the hazardous area as a panel PC. VisuNet remote monitors are also available. The PC remains in the safe area, and the display, keyboard and mouse can be located up to two kilometers away in the hazardous area.

VisuNet has all the advantages that a modern network infrastructure based on standard Ethernet network components can offer.

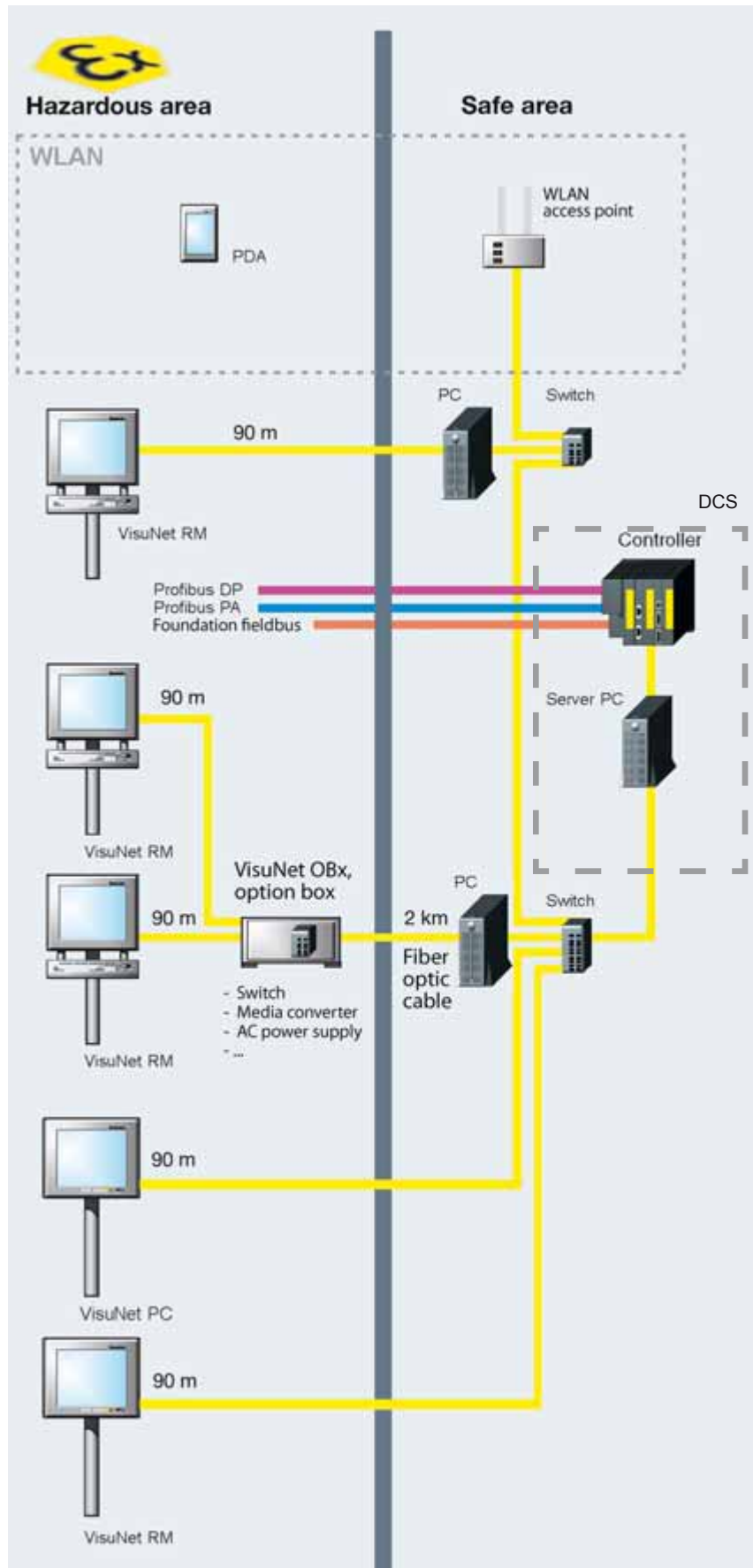
Since the use of Ethernet with the TCP/IP protocol is growing quickly in automation technology, existing network structures can be easily incorporated.

The **VisuNet** product family comprises

- VisuNet PC, Panel-PC Systems
- VisuNet RM, Remote monitor stations
- VisuNet OBx, option boxes can be equipped with a power supply and network components

VisuNet systems are designed for installation and operation in the hazardous area in accordance with

- ATEX, Category II 2G (Zone 1 Gas)
- ATEX, Category II 2D (Zone 21 Dust) (*restricted module selection*)
- IEC Ex, Zone 1/21
- As a non-hazardous area version for demanding applications in industry





The VisuNet PC415/419 Panel PCs, designed for use in the hazardous area, set new standards in

- PC performance (1.8 GHz processor),
- Housing design (stainless steel front plate)
- Modular concept

and offer optimum conditions for processing and presenting information directly at the process location.

The integrated Ethernet interface enables the system to be connected to existing data networks.

For example, together with the VisuNet option boxes, a number of VisuNet PCs can be networked in the hazardous area bridging distances up to two kilometers from the hazardous area.


PANEL PC “VISUNET PC415/419”

- Full PC functionality
- Ethernet connectivity
- USB and serial interfaces
- Back-up and recovery software
- Free choice of operating system
- Front access for simple installation and maintenance
- Stainless steel front plate for high loading
- Modular system consisting of display, keyboard, mouse, housing and mounting options

	VisuNet PC415	VisuNet PC419
Display		
Screen diagonal	15.0"	19.0"
Display resolution	1024 x 768 (XGA)	1280 x 1024 (SXGA)
Type	LCD, TFT	LCD, TFT
Available display colors	16.7 Million	16.7 Million
Graphic memory	32 MB	32 MB
Brightness (Standard)	250 cd/m ²	300 cd/m ²
High Brightness (optional)	600 cd/m ²	–
Viewing angle	horizontal 170° (160°) vertical 170° (115°)	horizontal 178° vertical 178°
Contrast	400:1	1000:1
50 % life cycle		
CCFL display	50,000 h	50,000 h
PC System		
Processor	1.8 GHz, Pentium M	1.8 GHz, Pentium M
RAM	512 MB / 1 GB optional	512 MB / 1 GB optional
Hard disk	30 GB	30 GB
Interface		
Exe	1 x Fast Ethernet 1 x USB 1 x RS232/422 1 x RS485	1 x Fast Ethernet 1 x USB 1 x RS232/422 1 x RS485
Exi	3 x USB	3 x USB
Barcode scanner	1 x TTY	1 x TTY
Operating controls		
Special function keys	6+2	6+2
LED	3	3
Touch screen (optional)	resistive	resistive
Performance data		
Power consumption	Approx. 85 W	Approx. 85 W
Supply voltage	24 V DC (20 ... 30 V)	24 V DC (20 ... 30 V)
Ambient temperature operation	-20 °C ... +50 °C	-20 °C ... +50 °C
Ambient temperature storage	-20 °C ... +60 °C	-20 °C ... +60 °C
Dimensions (B x H x T)		
Dimensions:	503 x 423 x 188 mm	537 x 457 x 188 mm
Cutout dimensions	431 x 354 mm	466 x 389 mm
Weight (PC4xx)	Approx. 33 kg	Approx. 41 kg
Front plate		
Stainless steel	1.4301/ 304 1.4404/ 316L (optional)	1.4301/ 304 1.4404/ 316L (optional)
Housing degree of protection	IP66	IP66
Approvals		
ATEX	Zones 1, 21	Zones 1, 21
IEC Ex	Zones 1, 21	Zones 1, 21
Others	on enquiry	on enquiry
Field housing (optional)		
Stainless steel	1.4301/ 304 1.4404/ 316L (optional)	1.4301/ 304 1.4404/ 316L (optional)
Housing degree of protection	IP66	IP66
Weight (housing)	25 ... 30 kg	25 ... 30 kg

Panel-PC = Operator Panel + PC Unit

This combination of operator panel with integrated powerful PC unit is the ideal platform for a display and operator terminal with a customer-defined visualization system, for soft PLC systems, for client server applications and web terminals.



VisuNet RM uses RDP!

VisuNet Remote Monitor solutions for PC-based visualization of processes and plants use the widely accepted Ethernet network technology and the TCP/IP protocol for data transfer. The data are digitally transferred using the "Remote Desktop Protocol," which is integrated in the Windows operating system.

This enables a VisuNet RM to be connected with the PC in the safe area as a normal network component.

HOUSING AND MOUNTING OPTIONS

- Stainless steel housing in 1.4301 and 1.4404
- Housing degree of protection IP66
- Front access for optimum installation and maintenance
- Modular system comprising: Basic housing, mounted housing for Emergency stop button, keyboard, scanner mounting and various mounting options.



Options	
Mounting version	
Wall mounting bracket	•
Pedestal	•
Ceiling mounting	•
Wall support arm	•
Coupling adapter options	
Rotary coupling	•
Tilt adapter	•

Pedestals and brackets are made from stainless steel.

Various mounting accessories enable VisuNet to be mounted on the floor, wall or on a ceiling. The basic version is fixed. However, adapters are available that enable the unit to rotate or tilt. It is also possible to combine the adapters so that the unit can both rotate and tilt.

INTRINSICALLY SAFE KEYBOARD-MOUSE SYSTEMS. ...CAN BE CONNECTED DIRECTLY TO VISUNET RM/PC SYSTEMS.

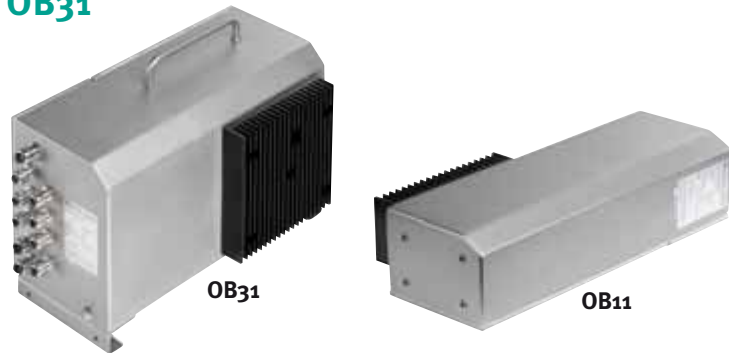


Description	
Versions	
K3	Keyboard with tracker ball
K4	Keyboard with touchpad
K6	Keyboard with joystick
...	Other versions available on enquiry
Keyboard Layout:	105 Short-stroke keys, approx. 3 million switching cycles US American - International, German, French, Cyrillic, Swedish, Danish, Korean and many others
Dimensions (B x H x T)	
Dimensions:	482.6 x 177.8 x 45 mm
Opening dimensions	450 x 150 mm
Front plate	Anodized aluminum, polyester film
Housing degree of protection	IP65 (K3, K6), IP66 (K4)
Interface, Exi	USB
Performance data	
Supply voltage	provided via VisuNet RM / PC
Ambient temperature Operation	0 °C ... +50 °C (K3), +20 °C ... +50 °C (K4, K6), in combination with keyboard heating
Ambient temperature Storage	-20 °C ... +60 °C
Approval	
ATEX	Zone 1 (K3, K4, K6), Zone 21 (K4, K6)
IEC Ex	Zone 1 (K3, K4, K6), Zone 21 (K4, K6)
Others	on enquiry
Housing (optional)	
Stainless steel	1.4301/ 304 1.4404/ 316L (optional)
Housing degree of protection	IP65 (K3, K6), IP66 (K4)
Weight (housing)	5 kg

VISUNET OPTION BOXES OB11 AND OB31

VisuNet option boxes enable customer-specific requirements to be satisfied with regard to

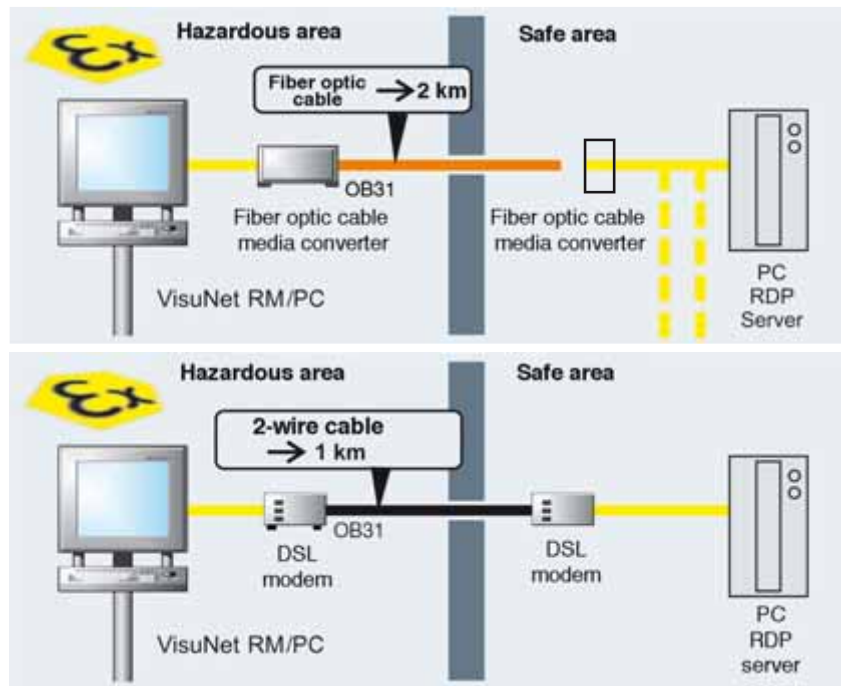
- AC power supply
- Data transfer technology
- Network infrastructure
- Interface with customer-specific devices



Solution for long transfer distances.

Long, non-segmented distances are bridged with

- isolated/noise-free, 2-wire fiber optic cables (max. 2000 m)
- DSL copper cable (max. 1000 m)



Description	OB11	OB31
Modules: Power supply (In: 100 ... 240 V AC +/-10%, 50 ... 60 Hz Out: 24 V DC) fiber optic media converter + 5 port switch DSL modem	•	• •
Dimensions (B x H x T) Dimensions:	452 x 191 x 110 mm	450 x 285 x 226 mm
Approvals ATEX IEC Ex Others	Zones 1, 21 Zones 1, 21 on enquiry	Zones 1, 21 Zones 1, 21 on enquiry
Field housing Stainless steel Housing degree of protection	1.4301/ 304 1.4404/ 316L (optional) IP65	1.4301/ 304 1.4404/ 316L (optional) IP65
Weight:	Approx. 13 kg	Approx. 22 ... 26 kg

REMOTE MONITOR STATION: “VISUNET RM515/519”

- Full PC functionality
- Ethernet connectivity
- USB and serial interfaces
- Front access for simple installation and maintenance
- Stainless steel front plate for high loading
- Modular system consisting of display, keyboard, mouse, housing and mounting options
- Open system platform, integration with existing network infrastructure is possible

	VisuNet RM515	VisuNet RM519
Display		
Screen diagonal	15.0"	19.0"
Resolution	1024 x 768 (XGA)	1280 x 1024 (SXGA)
Display resolution	640 x 480 up to 1024 x 768	640 x 480 up to 1280 x 1024
Type	LCD, TFT	LCD, TFT
Available display colors	16.7 million	16.7 million
Brightness	250 cd/m ²	300 cd/m ²
High brightness (optional)	600 cd/m ²	–
Viewing angle	horizontal 170° (160°) vertical 170° (115°)	horizontal 178° vertical 178°
Contrast	400:1	1000:1
50 % life cycle		
CCFL display	50,000 h	50,000 h
Interfaces		
Exe	1 x Fast Ethernet 1 x USB 1 x RS232/422 (optional) 1 x RS485	1 x Fast Ethernet 1 x USB 1 x RS232/422 (optional) 1 x RS485
Exi	1 x USB (optional)	1 x USB (optional)
Keyboard, mouse	2 x USB	2 x USB
Touch screen	1 x USB	1 x USB
Barcode scanner	1 x TTY	1 x TTY
Operating controls		
Touch screen (optional)	resistive	resistive
Performance data		
Power consumption	approx. 75 W	approx. 75 W
Supply voltage	24 V DC (20 ... 30 V)	24 V DC (20 ... 30 V)
Ambient temperature Operation	-20 °C ... +50 °C	-20 °C ... +50 °C
Ambient temperature Storage	-20 °C ... +60 °C	-20 °C ... +60 °C
Dimensions (B x H x T)		
Dimensions:	503 x 423 x 188 mm	537 x 457 x 188 mm
Opening dimensions	431 x 354 mm	466 x 389 mm
Weight (RM5xx)		
	Approx. 33 kg	Approx. 41 kg
Front plate		
Stainless steel	1.4301/ 304 1.4404/ 316L (optional)	1.4301/ 304 1.4404/ 316L (optional)
Housing degree of protection	IP66	IP66
Approvals		
ATEX	Zones 1, 21	Zones 1, 21
IEC Ex	Zones 1, 21	Zones 1, 21
Others	on enquiry	on enquiry
Field housing (optional)		
Stainless steel	1.4301/ 304 1.4404/ 316L (optional)	1.4301/ 304 1.4404/ 316L (optional)
Housing degree of protection	IP66	IP66
Weight (housing)	25 ... 30 kg	25 ... 30 kg

PROCESS AUTOMATION – PROTECTING YOUR PROCESS

For over a half century, Pepperl+Fuchs has been continually providing new concepts for the world of process automation. Our company sets standards in quality and innovative technology. We develop, produce and distribute electronic interface modules, Human-Machine Interfaces and hazardous location protection equipment on a global scale, meeting the most demanding needs of industry. Resulting from our world-wide presence and our high flexibility in production and customer service, we are able to individually offer complete solutions – wherever and whenever you need us. We are the recognized experts in our technologies – Pepperl+Fuchs has earned a strong reputation by supplying the world's largest process industry companies with the broadest line of proven components for a diverse range of applications.



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