

Operator Interfaces Eagle Series ET-306, ET-316, ET-336

- Universal operator interfaces with extensive functionality up to simple process visualization
- Marine approvals by DNV
- Applications
 - Machines and package units
 - Tankfarm automation
 - For use on ships
 - Operator interfaces in automation technology
- Highlights
 - Many functions for the optimum display and running of processes with international fonts (Unicode)
 - Connectivity to all major automation systems and PC networks
 - Easily integrateable card reader systems
 - Extended temperature range for outdoor installation
 - Engineering with SPSPPlusWIN
- Installation in hazardous areas worldwide
 - Zones 1, 2, 21, 22
 - NEC (pending)
 - GOST-R, INMETRO

	Zones					
	0	1	2	20	21	22
Installation in	X	X		X	X	



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The operator interfaces are intelligent visualization systems for automation applications. They can be installed in control cabinets or panels, for example. Users operate the device via the membrane keyboard integrated into the front plate and via the LCD display with touch screen. Communication with control and automation systems runs via interfaces (RS-232, RS-422/485, Ethernet) connected in the "e"-area at the back of the devices. Various peripheral devices, such as barcode scanners, card readers, USB sticks and WLAN / Bluetooth modules can be connected via USB interfaces or optional fitted modules. With a wealth of functions, these operator interfaces provide optimum visualization. Their active communication concept in combination with integrated functionality reduce the automation system workload. The ET-3x6-Tx and ET-3x6-Fx operator interfaces are compatible with their predecessors (ET-8A and ET-12), both in terms of software and functionality.

Selection Table

Version	Display Size	Function keys	Interfaces	Ordering code	Weight kg
ET-306 Basic unit	10.4"	12 (10 Softkeys)	RS-232; RS-422/485	ET-306	12,150
ET-316 Basic unit	10.4"	12	RS-232; RS-422/485	ET-316	12,150
ET-336 Basic unit	15"	8	RS-232; RS-422/485	ET-336	15,400

Note Please indicate the required add. to ordering code separately.

Order number supplement

Ethernet Version	Fiber Optic 100 Base Fx (Ex op is)	ET-3x6-FX	1,000
	Copper 10/100 Base Tx (Ex e)	ET-3x6-TX	--
Interfaces	additional WCRi Interface for e.g. Ex i Wiegand Reader	ET-3x6-WCRi	--
	additional RSi Interface for e.g. Ex i Barcode Reader	ET-3x6-RSi	--

Ordering example

Version:

ET-336 fitted in an enclosure V2A for wall mounting with barcode reader, completely mounted and for installation in Zone 1

Ordering:

Pos.	Ordering code
1	ET-336
1.1	ET-3x6-TX
1.2	ET-3x6-RSi
2	HSG-x36-V2A
2.1	HSG-xx6-V2A-W
2.2	HSG-xx6-BCR
3	BCSi-SK200-RSST
3.1	BCSi-SK200-Wall holder
4	VB-BC-3

Technical Data

Explosion protection	ATEX $\text{Ex} \text{ II 2 (2) G Ex d e mb Ib [ib] [opis] IIC T4}$ $\text{Ex} \text{ II 2 D Ex tD A21 IP65 T90 }^\circ\text{C}$		
Other certificates	GOST-R, INMETRO, KTL, DNV		
Version	ET-306	ET-316	ET-336
Display			
Specification	TFT-Color, 64 K colours	TFT-Color, 64 K colours	TFT-Color, 64 K colours
Size	10.4"	10.4"	15"
Resolution	VGA 640 x 480 pixels	SVGA 800 x 600 pixels	XGA 1024 x 768 pixels
Backlight	CFL Backlight	CFL Backlight	CFL Backlight
Life	50,000 h at 25 °C	50,000 h at 25 °C	50,000 h at 25 °C
Brightness	350 cd / m ²	350 cd / m ²	250 cd / m ²
Operation			
Touch Screen analog resistiv	8-wire Touch Screen	8-wire Touch Screen	8-wire Touch Screen
Keyboard	Polyester on aluminium plate	Polyester on aluminium plate	Polyester on aluminium plate
Function keys	12 labelling: 10	12	8
Soft keys	10	--	--
Alphanumerical and system keys	23	--	--
Additional keyboard	105 keys (optional)	105 keys (optional)	105 keys (optional)

Technical Data			
Version	ET-306	ET-316	ET-336
Interfaces			
Ethernet			
TX	10/100 Base-Tx	10/100 Base-Tx	10/100 Base-Tx
FX	100 Base-Fx optical fiber (Ex op is)	100 Base-Fx optical fiber (Ex op is)	100 Base-Fx optical fiber (Ex op is)
USB	2 Ex e / 2 Ex i	2 Ex e / 2 Ex i	2 Ex e / 2 Ex i
Serial	2 x RS-232 or RS-422/485	2 x RS-232 or RS-422/485	2 x RS-232 or RS-422/485
Profibus			
DP	with converter	with converter	with converter
MPI (optional)	with converter	with converter	with converter
Processor			
Version	Geode 300 MHz	Geode 300 MHz	Geode 300 MHz
RAM	64 MB	64 MB	64 MB
Flash Disk	64 MB Expansion 256 MB	64 MB Expansion 256 MB	64 MB Expansion 256 MB
Power supply			
Voltage	24 V DC	24 V DC	24 V DC
Current	max. 1.9 A	max. 1.9 A	max. 1.9 A
Operation system	RT Target	RT Target	RT Target
Ambient conditions			
Protection	Front IP66 Back IP65	Front IP66 Back IP65	Front IP66 Back IP65
Operating temperature range			
Cold start temperature	- 10 °C ... + 55 °C	- 10 °C ... + 55 °C	- 10 °C ... + 55 °C
during operations	- 20 °C ... + 55 °C	- 20 °C ... + 55 °C	- 20 °C ... + 55 °C
Operating with heater	- 30 °C ... + 55 °C	- 30 °C ... + 55 °C	- 30 °C ... + 55 °C
Storage	- 20 °C ... + 60 °C	- 20 °C ... + 60 °C	- 20 °C ... + 60 °C
Humidity	90 % at + 40 °C, non-condensing	90 % at + 40 °C, non-condensing	90 % at + 40 °C, non-condensing
Vibration	3 Hz ... 22 Hz 1 mm Amplitude 22 Hz ... 500 Hz 1 g	3 Hz ... 22 Hz 1 mm Amplitude 22 Hz ... 500 Hz 1 g	3 Hz ... 22 Hz 1 mm Amplitude 22 Hz ... 500 Hz 1 g
Shock			
Operation	15 g / 11 ms	15 g / 11 ms	15 g / 11 ms
Transport	25 g / 6 ms	25 g / 6 ms	25 g / 6 ms
Dimensions [mm]			
Front (w x h)	400 mm x 270 mm	372 mm x 270 mm	440 mm x 340 mm
Cut-out (w x h x d)	385.5 mm x 257.5 mm x 150 mm	359.5 mm x 257.5 mm x 150 mm	427.5 mm x 327.5 mm x 165 mm



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Accessories and Spare Parts			
Designation	Description	Ordering code	Weight kg
Stainless steel housing V2A	<ul style="list-style-type: none"> Material V2A, SS306 Dimensions (WxHxD): 570 mm x 570 mm x 320 mm with cover cut-out 	HSG-x06-V2A	21,850
		HSG-x16-V2A	21,850
		HSG-x36-V2A	21,850
Mounting options V2A (add. on price)	Wall mounting, 3 entries M20, moulded plastic	HSG-xx6-V2A-W	0,020
	300° rotating coupling on standpipe with length 1300 mm	HSG-xx6-V2A-STF	7,350
	300° rotating coupling on hanging elbow pipe with length 450 mm	HSG-xx6-V2A-EBT	1,000
	300° rotating coupling on wall mounted elbow pipe with length 450 mm	HSG-xx6-V2A-EBB	1,000
Housing options V2A (add. on price)	additional keyboard 30°	HSG-xx6-V2A-T	--
	additional Lexan glass for ambient temperatures down to -40 °C (with heater)	HSG-xx6-V2A-ST	3,550
	additional sunroof	HSG-xx6-V2A-SR	1,000
	additional hand grips	HSG-xx6-V2A-HND	--
Stainless steel housing V4A	<ul style="list-style-type: none"> Material V4A, SS316, sea water resistant Dimensions (BxHxT) 570 mm x 450 mm x 320 mm with cover cut-out 	HSG-x36-V4A	25,900
Mounting options V4A (add. on price)	Wall mounting, 3 entries M20, moulded plastic	HSG-xx6-V4A-W	0,040
	300 ° rotating coupling on standpipe with length 1300 mm	HSG-xx6-V4A-STF	--
Cover cut-out (add. on price)	cut-out top	HSG-xx6-CTT	--
	cut-out centered	HSG-xx6-CTC	--
Housing options (add. on price)	breather mounted in basic unit	HSG-xx6-B	0,030
	Heater 2 x 50 W with temperature controller and housing insulation for temperatures up to -30 °C	HSG-xx6-H	6,500
	additional cable gland M16 black	HSG-xx6-CG16	--
	additional cable gland M16 blue	HSG-xx6-CG16b	--
	additional cable gland M20 black	HSG-xx6-CG20	--
	additional cable gland M25 black	HSG-xx6-CG25	--
	cut-out for VB-USB-Plug front	HSG-xx6-USB-Plug	--
	mounting VB-USB-Plug inside	HSG-xx6-USB-Plug-I	--
Interface modules	cut-out for flange socket for scanner and scanner holder	HSG-xx6-BCR	--
	Fieldbus-Bridge Profibus DP	9185/12-46-10	1,000
	Single Port Fiber Switch with 10/100 BaseTx (4 x RJ45 Ports) to 100 BaseFX (1 x LWL Port MTRJ)	SK-KJ1710	1,000
	4 Port Fiber Switch with 100 Base Fx (4x LWL Ports MTRJ) to 100 Base Tx (4x RJ45 Ports)	SK-KJ1740	0,227
	S7 MPI Bus adaptor with RS-422 interface, DIN-Rail mounting, no handling block necessary	MPI-Box-SSW7-RK512-RS-422	1,000
Ex i Barcode Scanner	Handheld scanner with Ex i interface	BCSi-SK200-RSST	1,000
	Wireless scanner with Ex e interface (package including base station, recharger and belt clip)	BCSi-SK300-Pack	4,000
BCSi Wall holder	Wall holder incl. installation material	BCSi-SK200-Wandhalterung	1,000
Intrinsically safe card reader	Wiegand Effect Card reader with WCRi interface	WCRi-HID-Swipe	1,000
Card reader, intrinsically safe, contactless	Ex i Mifare Card reader with RSi interface	PCRI-Mifare	1,000
Programming cable	Exicom Eagle => PC	VB-99	1,000
Memory	USB-Stick, intrinsically safe, 4 GB	USBi-Drive-4GB	1,000
	USB extension and bracket with USB connection for front IP 65 or installation in field housing	VB-USB-Plug	--
Ex i Keyboard	in QWERTZ, 105 keys, PS2 interface	KBDi-PS2-QZ	1,800
	in QWERTY, 105 keys, PS2 interface	KBDi-PS2-QY	1,800
	in AZERTY, 105 keys, PS2 interface	KBDi-PS2-AY	1,800
Field cable	Adaptor on DIN-Rail LC --> SC	VB-LC-SC-jack	1,000
	Patch cable MTRJ => SC (SK-KJ1710 --> Exicom)	VB-SC-MTRJ	1,000
	Extension scanning interface to flange socket M12	VB-BC-3	1,000
Software	Engineering software for Operator Interfaces Eagle	SPSPlus-Win-4.xx	1,000
	Update current version	SPSPlusWin-Update	1,000
	Serial OPC Server for Windows XP	OPCom-Modbus-Serial-Server	1,000
	TCP/IP Ethernet OPC Server for Windows XP	OPCom-Modbus-Ethernet-Server	1,000
Handling blocks	for S7 Profibus DP	HB-S7-DP	1,000