



- SHARK Operator Station in “rugged design” as Panel PC / Thin Client
- Dual Ethernet via CAT7 or fiber optics, optionally with additional WLAN
- For Zones 1, 21 / 2, 22 / Class I, Zone 1 / Class I, Zone 2 / Class II, Div. 2 / Class III
- ATEX, IECEx, EAC, NEC, CEC, PESO, CNEEx, CCC, RCM and DNV / GL, ABS
- Extended temperature range: -40 °C ... +65 °C

## MY R. STAHL SHARKPCTCOSA



The SHARK Panel PCs / Thin Clients in rugged design have been developed for **extreme ambient conditions**: they are shock, vibration, saltwater and salt-spray-proof and have IP66. They have a modular design, consisting of a display module and an Electronic Box. In case of repair / maintenance, one of the two modules can be easily replaced. The Panel PCs / Thin Clients transmit data via dual Ethernet CAT7 or fibre optics, WiFi as an additional option. The sunlight-readable displays are multi-touch screens with an integrated front camera. The E-Box can be fitted with type Intel Core i5 or AMD GX processors. Optional accessories include RFID readers, barcode readers and a Bluetooth interface for headsets / keyboards.

Selection Table						
HMI type Product description	Rugged Panel 15" Panel PC					
Product Type	Application range (zones)	Ethernet / Data	Interface medium	Data cable length	Art. No.	Weight
ET-438-2FX	1 2 21 22	2x 100Base-FX (Ex op is)	Multi-mode optical cable	max. 5000 m (for core cross section 50 and use of 9721/13-11-14) max. 4000 m (for core cross section 62.5 and use of 9721/13-11-14)		-
ET-438-2TX	1 2 21 22	2x 100/1000Base-TX (Ex e)	CAT7 Data transmission	max. 100 m		-
MT-438-2FX	2 22	2x 100Base-FX (Ex op is)	Multi-mode optical cable	max. 5000 m (for core cross section 50 and use of 9721/13-11-14) max. 4000 m (for core cross section 62.5 and use of 9721/13-11-14)		-
MT-438-2TX	2 22	2x 100/1000Base-TX (Ex e)	CAT7 Data transmission	max. 100 m		-

## Selection Table

HMI type Product description		Rugged Panel 15" Thin Client					
Product Type	Application range (zones)	Ethernet / Data	Interface medium	Data cable length	Art. No.	Weight	
ET-538-2FX	1 2 21 22	2x 100Base-FX (Ex op is)	Multi-mode optical cable	max. 5000 m (for core cross section 50 and use of 9721/13-11-14) max. 4000 m (for core cross section 62.5 and use of 9721/13-11-14)		-	
ET-538-2TX	1 2 21 22	2x 100/1000Base-TX (Ex e)	CAT7 Data transmission	max. 100 m		-	
MT-538-2FX	2 22	2x 100Base-FX (Ex op is)	Multi-mode optical cable	max. 5000 m (for core cross section 50 and use of 9721/13-11-14) max. 4000 m (for core cross section 62.5 and use of 9721/13-11-14)		-	
MT-538-2TX	2 22	2x 100/1000Base-TX (Ex e)	CAT7 Data transmission	max. 100 m		-	
HMI type Product description		Rugged Panel 21.5" Panel PC					
Product Type	Application range (zones)	Ethernet / Data	Interface medium	Data cable length		Art. No.	Weight
ET-498-2FX	1 2 21 22	2x 100Base-FX (Ex op is)	Multi-mode optical cable	max. 5000 m (for core cross section 50 and use of 9721/13-11-14) max. 4000 m (for core cross section 62.5 and use of 9721/13-11-14)			-
ET-498-2TX	1 2 21 22	2x 100/1000Base-TX (Ex e)	CAT7 Data transmission	max. 100 m			-
MT-498-2FX	2 22	2x 100Base-FX (Ex op is)	Multi-mode optical cable	max. 5000 m (for core cross section 50 and use of 9721/13-11-14) max. 4000 m (for core cross section 62.5 and use of 9721/13-11-14)	-		
MT-498-2TX	2 22	2x 100/1000Base-TX (Ex e)	CAT7 Data transmission	max. 100 m	-		

Selection Table						
HMI type Product description		Rugged Panel 21.5" Thin Client				
Product Type	Application range (zones)	Ethernet / Data	Interface medium	Data cable length	Art. No.	Weight
ET-598-2FX	1 2 21 22	2x 100Base-FX (Ex op is)	Multi-mode optical cable	max. 5000 m (for core cross section 50 and use of 9721/13-11-14) max. 4000 m (for core cross section 62.5 and use of 9721/13-11-14)		-
ET-598-2TX	1 2 21 22	2x 100/1000Base-TX (Ex e)	CAT7 Data transmission	max. 100 m		-
MT-598-2FX	2 22	2x 100Base-FX (Ex op is)	Multi-mode optical cable	max. 5000 m (for core cross section 50 and use of 9721/13-11-14) max. 4000 m (for core cross section 62.5 and use of 9721/13-11-14)		-
MT-598-2TX	2 22	2x 100/1000Base-TX (Ex e)	CAT7 Data transmission	max. 100 m		-

Technical Data	
<b>Explosion Protection</b>	
Application range (zones)	1 2 21 22
Application range (divisions)	Class I, Zone 1 Class I, Division 2 Class II, Division 1 and 2 Class III
IECEX certification	IECEX BVS 14.0116X
ATEX certification	BVS 14 ATEX E 134 X
Scope	EU (CE / ATEX) International (IECEX) USA (NEC) Canada (CEC) China (CCC / CNEEx) India (PESO) Australia (RCM) Marine / ship certification ABS Marine / ship certification DNV
<b>Electrical Data</b>	
Rated operational voltage AC	230 V
Rated operational voltage DC	24 V
<b>Ambient Conditions</b>	
Ambient temperature operation	-10 °C ... +65 °C
Storage temperature	-40 °C ... +70 °C
<b>Display</b>	
Display size inch	15
Total pixels	1024 x 768
Display version	TFT colour display or sunlight-readable display
Display dimensions	4:3
Display brightness	TFT 450 cd/m <sup>2</sup> SR 1200 cd/m <sup>2</sup>
Display contrast	TFT 500:1 SR 600:1

Technical Data	
Display	
Backlight	LED Technology
Mechanical Data	
Material front	Seawater resistant and coated aluminium, hardened glass
Material back	Seawater-resistant powder coated aluminum
Ingress protection	IP66
IP enclosure front	IP66
IP enclosure back	IP66
Mounting / Installation	
Mounting option	Yoke and wall-mounting, handle and feet, sun protection roof, panel mount (with xx8 Mounting-Kit)
Enclosure design	VESA 200 Standard, VESA 200 Top Connect
Components	
Keyboard	optional, attached keyboard and pointing device (trackball, joystick or touchpad (Ex ia))