MARITIME
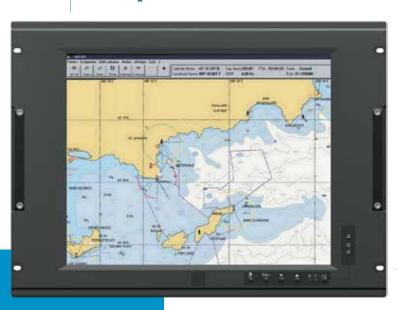
RUGGED LCD MONITORS

E50 SERIES

19" RUGGED LCD MONITOR
EC/EH 5519SX

19"

Key Features
➤ ECDIS compliant
➤ Waterproof mount
➤ High brightness capability

Options
➤ Cold start at -20° C
➤ Resistive or capacitive touchscreen
➤ Touch input device
➤ Optical Bonding of the LCD panel

The **E50 Series Monitor Range** is the result of the best cutting-edge display technology combined with every functional, implementation and use constraints applied to the most demanding sectors of Defense and Industry.

Take the advantage of what the best of technology can bring to your Maritime embedded IT systems requirements. Because you have a variety of use and operational needs, the IRTS E50 Series offers a comprehensive range of Monitors with several levels of protection, reinforcement and a wide choice of options (Power supply, connectors, touch input device, optical and electronic treatments...).

Our competitive prices ensure that you make the right investment whenever you buy a product at **IRTS**.

www.irts.fr

RUGGED ELECTRONICS, COMPUTERS & DISPLAYS

PRODUCT RANGE

EC and **EH 5519SX** 19" LCD monitors are part of the **E50 series**, a comprehensive range of displays described in the table below :

IRTS Monitors E50 Series								
E50 Series - Industrial Range								
Diagonal Sizes	**17"**	**19"**	**20"1**	**21"3**	**24"**	**17"3**	**21"5**	**24"**
Screen Ratios	5/4	5/4	4/3		16/10	16/9		
Resolutions	1280x1024 SXGA	1280x1024 SXGA	1600x1200 UXGA		1920x1200 WUXGA	1920x1080 FHD		
EC 50 series - Standard Brightness								
Brightness (cd/m²)	300	300	250	400	300	330	250	250
Waterproof Panel Mount	EC 5117SX	EC 5019SX	EC 5020UX	EC 5221UX	EC 5224WU	EC 5117HD	EC 5221HD	EC 5224HD
19" Rack Mount	EC 5517SX	EC 5519SX	EC 5520UX					
EH 50 series - High Brightness								
Brightness (cd/m²)	800	800	550			800	800	800
Waterproof Panel Mount	EH 5117SX	EH 5019SX	EH 5020UX			EH 5117HD	EH 5221HD	EH 5224HD
19" Rack Mount	EH 5517SX	EH 5519SX	EH 5520UX					

See also the other series of display panels in the 50 monitors' range specifically designed for Airborne (D50), Industry (E50) and Navy (M50) applications.

PRODUCT CONFIGURATION

IRTS offers several configuration solutions according to environmental conditions and customer's needs.

		Commercial reference					
		Standard Brightness E50 series EC5519SX	....	....	....	....	....
		High Brightness E50 series EH5519SX	....	....	....	....	....
Power Supply	**0**	12 VDC on HE308					
	2	85/240 VAC 47-63Hz - 120/370 VDC on IEC 320					
	3	85/240 VAC 47-63Hz - 120/370 VDC on HE308					
	4	18-36 VDC on HE308					
Front Glass	**LC**	Antireflective Glass					
	RR	Resistive RS232 Touch Screen (with standard luminance loss of 20%)					
	RU	Resistive USB Touch Screen (with standard luminance loss of 20%)					
Input Video Connectors	**2**	Video: 2 x DVI-I					
	B	Video: DVI-D, RGB H/V, PIP : CVBS					
	S	Video: DVI-I, VGA HD15, PIP : CVBS & S-VHS					
Temperature Range	**S**	Standard Operating Range : 0° C to 55° C					
	E	Extended Operating Range : -20° C to 55° C					
Options	**B**	Bonding LCD Panel					
	V	Electronic Part Coating					

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MKT-DS-EC/EH-MAR5519SX-1.0C

PRODUCT SPECIFICATIONS

Display Module 19" SXGA (1280 x 1024)		
	EC5519SX	**EH5519SX**
Brightness (user)	550 cd/m² +/-10%	900 cd/m² +/-10%
Active display area	376.32 mm x 301.06 mm	376.32 mm x 301.06 mm
Dot pitch	0.294 (H) x 0.294 (V) mm	0.294 (H) x 0.294 (V) mm
Viewing angles (LCD Panel)	89°-89° (H) / 89°-89° (V)	80°-80° (H) / 80°-80° (V)
Response Time	8 ms	8 ms
Contrast Ratio (LCD Panel)	2000 : 1	800 : 1
Display Color	16.7 M 8 bits	16.7 M 8 bits
Backlight	LED	LED
Dimming ratio	10 to 100%	10 to 100%
Controls		
"On Screen Display" (OSD)	Front waterproof 5-key keyboard	
Backlight brightness	Direct access by front waterproof 2-key keyboard	
Remote control	RS232	
Physical Features		
Dimensions	8U: 482.6 x 354.8 x 97.35 mm (without removable handles)	
Weight	9.3 Kg +/- 10 %	
Packaging / color	Aluminum / Matt Black C3603 UB5-10 liquid paint or RAL 101 Black Powder	
Environmental conditions		
Operating temperature	0°C to 55°C (Cold Start -20°C Option)	
Storage temperature	-32°C to +70°C	
Humidity	10% To 90% Relative Humidity, non-condensing	
Shock	30g - 11msec Half sine - X,Y,Z axis	
Vibration	2 Hz to 5 Hz and up to 13.2 Hz with an excursion of ±1 mm ± 10 %, IEC 60945 Method 8.7.2 above 13.2 Hz and up to 100 Hz with a constant maximum acceleration of 7 m/s2, IEC 60945 Method 8.7.2	
Emission	Radiated Emission Class B, IEC 60945 Class B Conductive Emission Class B, IEC 60945 Class B	
Susceptibility	Immunity To Radiated Radiofrequencies, IEC 60945 Method EN61000-4-3 Immunity To Conducted Radiofrequency Interference, IEC 60945 Method EN61000-4-6 / EN 55022A Immunity to fast Transients on AC Power, Signals & Control line, IEC 60945 Method EN61000-4-4 / EN 50082-2	
Safety	CE Marking / EN 60950	
Ingress protection	IP65 (Front)	
Options		
OSD lock out		
Resistive touch screen with USB or RS-232 interface (with standard luminance loss of 20%)		
Ruggedized glass to glass touch screen for hot and humid conditions		
Dimming		
Warranty		
Two-year limited warranty (parts and labor), factory return under RMA procedure.		
Additional 2 years coverage and customized service plans available on request.		

TECHNICAL LAYOUT

Dimensions are in millimeters (mm).