METEOROLOGICAL **MEASUREMENT SYSTEM**

Meteorological Measurement System provides control of meteorological measurement sensors on the ship and data communication between them. It displays the data measured with the 10.1” touch screen on it. High speed full duplex RS422 is used for communication, providing an error-free and fast data transfer.

Rs422 NMEA0183, at least 100 Mbit/s Ethernet data communication

8 high speed full duplex RS422 NMEA0183

Compliance with environmental conditions

EMI/EMC compatibility

Data recording and playback

10.1“ Color touch screen

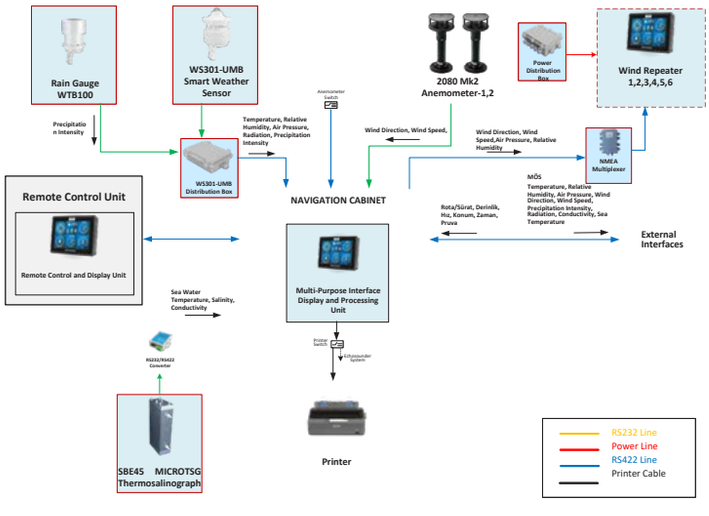
Port setting on the screen

Display night mode

Meteorological Measurement System is an ideal system for ships that need meteorological measurement.

It consists of various meteorological sensors and a central processing unit.

It transmits the meteorological data calculated with the measured values from the sensors and the data received from external sources to the systems that need it.



MEASURED **PARAMETERS**

Temperature, Relative Humidity, Air Pressure, Radiation, Wind Intensity, Wind Direction, Precipitation Intensity, Rain Amount, Sea Temperature, Salinity, Conductivity.

PARAMETERS RECEIVED FROM EXTERNAL SOURCES

Heading, Speed, Depth, Position, Time, Bow

CALCULATED P**ARAMETERS**

Cloud Bottom Base, Genuine Wind

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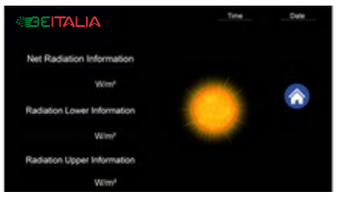
METEOROLOGICAL **MEASUREMENT SYSTEM**



TECHNICIAL SPECIFICATIONS

Screen	10.1”
Interface	8 x RS422 NMEA018
Operating Temperature Range	-20°C ~ +50°C
Operating Humidity Range	95%
IP-Class	IP64
Environmental Conditions	MIL-STD-810
EMI/EMC	MIL-STD-461
Ergonomics	MIL-HDBK-1472
Vibration	DOD-STD-167-1
Mechanical Shock	MIL-S-901D
Boxing	MIL-STD-108
Power Supply	MIL-STD-1399 (STANAG 1008)
SEA TEMPERATURE AND SALINITY SENSOR	
Conductivity Accuracy	± 0,0003 s/m
Operation Pressure Range	34,5 dB (50 psi) max
Temperature Accuracy	± 0,002 °C
Temperature Range	-5 wth +35 °C
Flow Rate	10 - 30 ml/sn (0.16 - 0.48 gal/dk)
Sampling Rate	Sampling from 1 second to 9 hours
Temperature Stability	0.0002 °C per month
SMART AIR SENSOR	
Temperature	Measurement method: NTC | Measuring Range: -50 ... 60 °C Accuracy: ±0.2 °C (-20...50 °C) and ±0.5 °C (>-30 °C)
Relative humidity	Measurement method: Capacitive | Measuring Range: 0 ... 100 % RH Accuracy: ±2 % RH
Air pressure	Measurement method: MEMS Capacitive Measuring Range: 300 ... 1200 h | PaAccuracy: ±0.5 hPa (0...40 °C)
Radiation	Response Time: (95%): < 18 s | Measuring Range: 2000 W/m² Spectral Range: 300...2800 nm
RAIN DISPLAY SENSOR	
Accuracy	± 2 %
Resolution	0,2
Max. Intensity	144 mm/s
WIND SPEED AND DIRECTION SENSOR	
Wind Speed Measurement	Measuring Range: 0-120 knots | Accuracy: ±2 % | Stability: 0,01 knots
Wind Direction Measurement	Measuring Range: 0° - 359° | Accuracy: ±3° | Stability: 0,1

Berkin Engineering without notice in product specifications reserves the right to make changes.