SMC-520
Temperature and Humidity Sensor

SMC
SHIP MOTION CONTROL

The SMC SMC-520 is designed for high demanding outdoor applications for temperature and humidity measurement. The SMC-520 delivers a reliable and accurate readings for various meteorology applications.

Function
The SMC-520 uses a high grade PT1000 element for the temperature measurement and a capacitive humidity sensor with excellent long-term drift performance. Data is processed within the instruments internal processor and output over a serial communication port.

Environmental
The SMC-520 casing is produced out of UV resistant ABS plastic material. The temperature and humidity sensor is delivered with a sintered Teflon filter to protect the sensing elements from water, dust and dirt. The SMC-520 is IP66 rated.

Calibration
The SMC temperature sensor is factory calibrated for the range -40 to +60 degrees Celsius. The humidity sensor is adjusted for both temperature and humidity level parameters to deliver accurate data. SMC uses a multiple point calibration to cover the specified temperature and humidity range. Offset adjustments to the temperature and humidity measurement can be made onsite using the instrument configuration software.

Communication
The SMC-520 have RS232 and RS485 outputs and is transmitting its data in a standard ASCII string. The temperature and humidity string is easily integrated to dataloggers and display software available on the market.

Key Features
- Operational range -40 to +60° Celsius
- 0.2° Celsius Accuracy
- 1.5% Humidity Accuracy
- Excellent Long term Stability
- Serial NMEA Communication
- 2 years Warranty

About SMC
SMC is an ISO9001:2015 quality management certified company, manufacturing weather instruments, motion sensors and system integration software packages, such as Helideck Monitoring and Motion Monitoring systems, for the global marine industry.

Specification SMC-520

Performance

Temperature Accuracy 0.2° Celsius
Temperature Range -40 to +60° Celsius
Temperature Long Term stability <0.1° Celsius per Year

Humidity Accuracy 1.5% in the range 0...90%, 2% in the range 90...100%
Humidity Range 0...100%
Humidity Long Term Stability 0.25% per year typical

Communication

Com1: RS232
Com2: RS485

SMC Configuration software included
User selectable Output Protocols

Physical

Housing Material UV resistant ABS plastic
Dimensions (H x ØW) 245 x 35mm excl connector
Weight 0.2 kg

Cable connector 8 pins, M12 connector. 5 meter shielded PUR cable included

Environmental

Operating Temperature -40° to +60° Celsius
MTBF (computed) 50 000 hours
IP66

Electrical

Power requirements 12 - 30 VDC; 0.6 W
Complies with the IEC 60945

Warranty & Support

2-year Limited Hardware & Software Warranty
Free Technical & Hardware support