

Measuring Instruments for Marine Applications

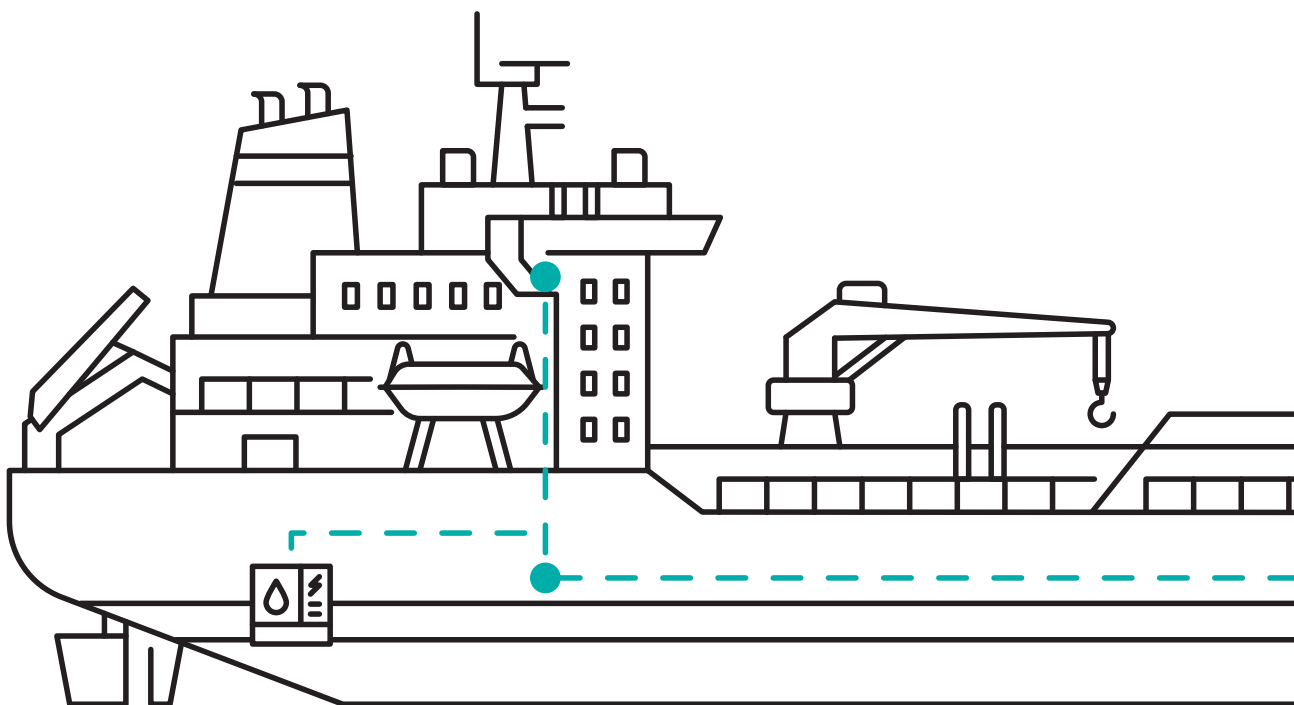


Measuring Instruments for Marine Applications

Iskra offers a comprehensive range of electrical measuring instruments for marine applications, designed to support monitoring, control and synchronisation in marine power systems. The portfolio includes digital multimeters with communication, generator synchronisation meters and analogue instruments, providing clear insight into essential electrical parameters.

From measuring voltage, current, power and energy to monitoring phase differences and system frequency, these instruments address a wide range of onboard measurement needs. The portfolio covers single- and three-phase networks, with analogue displays for various electrical quantities and models offering outputs or communication capabilities for monitoring and control.

► Typical applications include electrical network monitoring, generator synchronisation, power and energy measurement, frequency monitoring and the display of process values. Available functions and configuration options vary according to the selected instrument.





Digital multimeters with communication

The MT440 measures and monitors single- or three-phase electrical networks. The MC350H network recorder measures electrical quantities and supports harmonic analysis. Both product families offer configurable input/output options for monitoring and control.



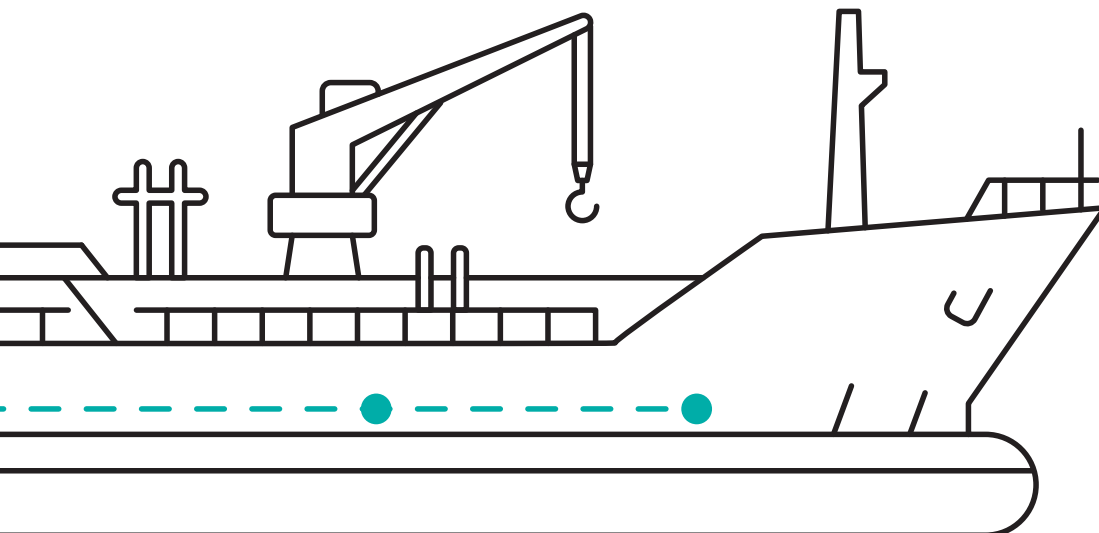
Synchronization meters

The SQ series supports manual or semi-automatic synchronisation of generators and busbars. Depending on the model, instruments can indicate phase difference and provide voltage and frequency information for the two systems.



Analogue meters

The analogue range includes instruments for AC voltage and current, frequency, energy, active and reactive power, DC process values and power factor. Available instrument types include FQ, ZQ, WQ, EQ, BQ, CQ and YQ.





Digital multimeters with communication

MT440 Measuring Transducer

Measures instantaneous values of more than 50 quantities, including voltage, current, active and apparent power, reactive power, energy, power factor, frequency, thermal maximum demand and total harmonic distortion (THD).

- ▶ Automatic voltage and current ranges up to 600 V L-N and 12.5 A.
- ▶ Universal auxiliary supply: 24 - 300 V DC or 40 - 276 V AC.
- ▶ Power accuracy class 0.5 (EN 60688).
- ▶ Up to four I/O modules, including analogue output, pulse output, alarm output and general-purpose digital output.
- ▶ Programmable bipolar analogue output with multiple breakpoints and non-linear characteristics.
- ▶ USB configuration without an auxiliary power supply.

MC3×0 network recorder series

Measures instantaneous values of more than 60 quantities, including voltage, current, active, reactive and apparent power, power factor, phase angle, frequency and THD.

- ▶ Harmonic measurement up to the 31st harmonic.
- ▶ Automatic voltage and current ranges up to 600 V L-N and 12.5 A.
- ▶ Active energy accuracy class 0.5S.
- ▶ Up to four I/O modules, including analogue output, pulse output, alarm output and tariff input.
- ▶ Four energy counters with a tariff clock or tariff input.



Synchronisation meters

SQ0204, SQ0214, SQ0104 and SQ0114

- ▶ Designed for manual or semi-automatic synchronisation of generators and busbars.
- ▶ Synchronisation relay output, either pulse or continuous.
- ▶ Dual voltage and frequency display, depending on model.
- ▶ Power supply from the busbar or generator.
- ▶ Available in standard 96 × 96 mm or 144 × 144 mm DIN housings.
- ▶ Status output.

Related instruments

- ▶ The ZQ1207 or ZQ1208 two-system frequency meter measures frequencies in two networks. The FQ1207 or FQ1208 double-voltage meter measures voltages in two networks. The front frames measure 96 × 96 mm. Ship versions of the SQ0204, ZQ1207 and FQ1207 are available on request.
- ▶ The SQ0201 phase-sequence indicator identifies phase sequence in a three-phase network from 200 V to 500 V and from 50 Hz to 60 Hz. Two built-in glow lamps indicate the L1, L2 and L3 phase sequence.



Analogue meters

FQ – AC voltage or current meters with moving iron

- ▶ For measuring AC current and voltage, with resistance to mechanical vibration.

ZQ – Frequency meters

- ▶ Available as reed or pointer frequency meters. The reed frequency meter measures AC supply frequencies from 45 Hz to 65 Hz, with minimal temperature effect and good readability from a distance.

WQ – Energy meters with power display and analogue pointer

- ▶ For energy measurement with an analogue power display.

EQ – Active and reactive power meters

- ▶ Suitable for single- or three-phase, three- or four-wire, balanced or unbalanced connections.

BQ – Moving-coil meters

- ▶ For measuring DC process values, such as speed, revolutions per minute (RPM) and rudder position.

CQ – Moving-coil meters with rectifier

- ▶ For measuring DC and AC voltage or current. The linear scale is easy to read from a distance and offers resistance to mechanical vibration.

YQ – Power factor meters

- ▶ Mounting in accordance with DIN 43700.

Explore Iskra products and solutions



Product lines

Intelligent solutions for the future



Smart Energy Meters

leaflet



Low Voltage Switchgear for Residential applications

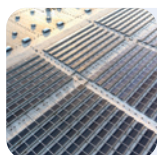


Low Voltage Switchgear for Industrial applications



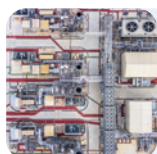
Capacitors

brochure package



Power Electronic

Capacitors



Power Factor Correction Equipment for Low Voltage



Power Factor Correction Equipment for High voltage

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