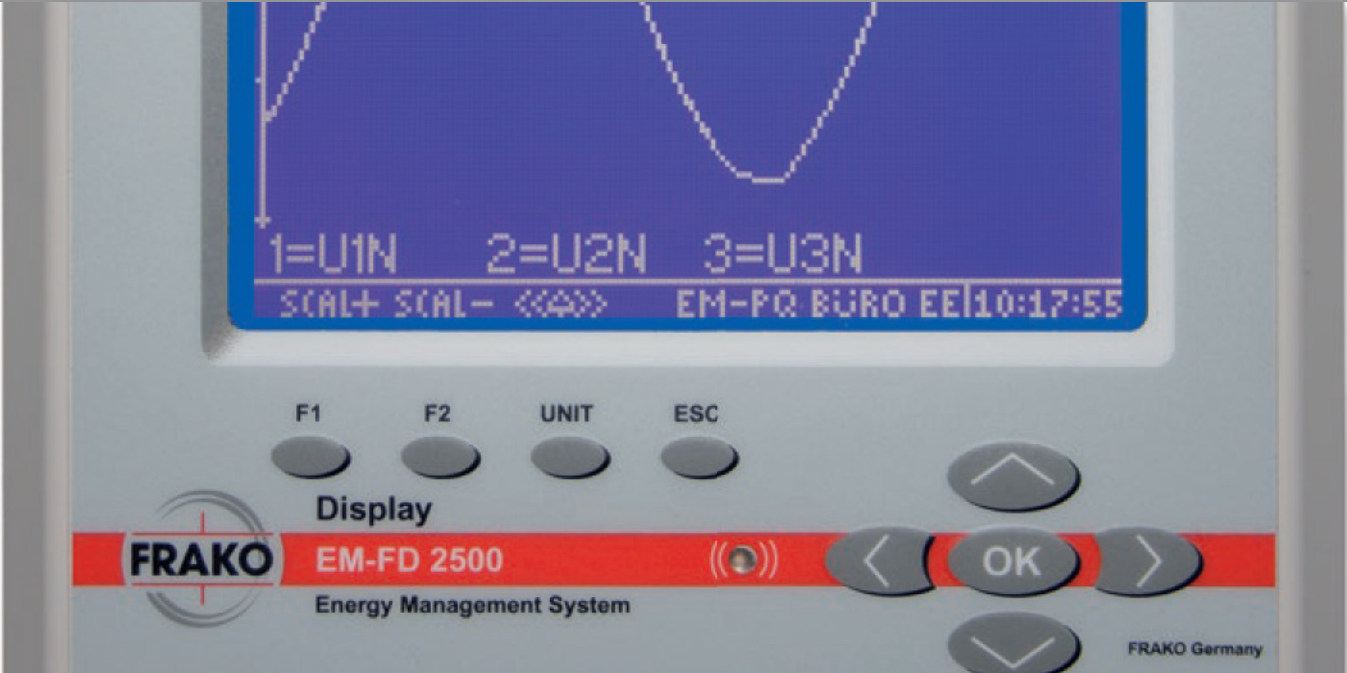


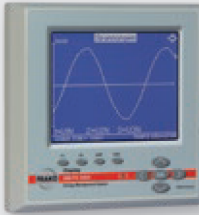
# Devices of the PQ Series

Display Unit



## Display Unit

The monitoring of currents, harmonics, temperatures, etc. has now become standard practice to uphold supply network quality. The FRAKO Starkstrombus and the other components of the system form a powerful energy information system. All data are available centrally.

	EM-FD 2500
	
Voltage	supplied via EM device
Frequency	-
Power consumption	Max. 3 VA
Operating-/display element	9 buttons / bright LC display / 1 LED
<b>Interfaces</b>	
CAN-Bus	•
RS-232 / RS-485	-
Connection with	EM-MC 2200 EM-PQ 2300

# Devices of the PQ Series

Display Unit

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# Devices of the PQ Series

Display Unit



## EM-FD 2500 Display Unit

The EM-FD 2500 is a graphic display in DIN rail housing to display measurements and wave forms of up to 7 Energy Management devices of the latest generation (e.g. Maximum Controller EM-MC 2200 or Mains Monitoring Unit EM-PQ 2300).

### Description

- Front mounting of the display with little effort by a Ø 22.5 mm fixing and a screw to prevent rotation
- Only one cable (4-pin) from the display to the EM device
- Connection of max. 8 EM devices via display bus:
  - 1 display + 7 EM devices
  - 2 displays + 6 EM devices

# Devices of the PQ Series

Display Unit

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## Technical Data

Power supply	
Voltage	11 V up to 16 V DC, reverse polarity protection, power is to be connected by the EM device
Fuse protection	Internal via 500 mA SMD fuse
Power consumption	Max. 3 VA
Connections	Via plug-in terminals
Conductor cross-section	Max. 1.5 mm <sup>2</sup>
Interfaces	
Display bus	CAN according to ISO 11898, RS-485, impedance level 120 Ohm Transfer rate: 1 Mbit/s Length of bus: max. 40 m
Mechanical construction	
Dimensions	147 × 147 × 53 mm (W × H × D) including connector, cabinet overhang 23 mm, depth cabinet max. 30 mm, including connector
Ingress protection	Front panel IP54 when using the enclosed sealing mat, housing front IP50 without sealing mat, terminals and terminal area IP20, degree of pollution 3, all data according to DIN EN 60529
Installation	In the front panel / door through a central hole Ø 22.5 mm and a hole for anti-turn locking , Ø 3.5 mm
Version	Insulated housing, Protection class 3 (SELV), working voltage up to max. 16 V
EMV	EMV according to EN 61326 -1, EN 61000-4-2 electrostatic discharge air 8 kV and conductive 4 kV with horizontal and vertical coupling plate, EN 61000-4-3 EMS radiated 80 MHz – 1GHz, horizontal and vertical, level 10 V/ m = irradiation industries Class B, EN 61000-4-4 Burst 1 kV capacitive on cable, EN 55022A EMI 30 MHz – 1 GHz = irradiation residential area Class A
Weight	330 g
Operating conditions	
Temperature range	0 °C up to +60 °C, no dewing
Installation height	Geographical height max. 2000 m
Article-No.	20-30240

## Optional Accessories

Article-No.	Type	Description
20-30242	Adapter plate for EM-FD 2500	Adapter for installation of the EM-FD 2500 in a cabinet opening (138 x 138 mm)