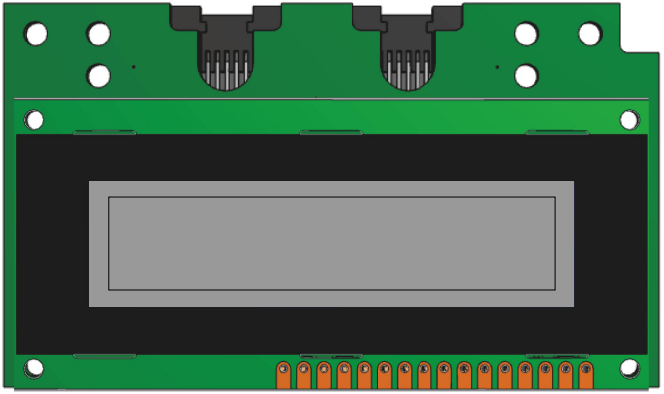
EN Manual

BENDER
The Power in Electrical Safety©

DPM2x16FP Module



For use in electric vehicle (EV) charging stations, wall boxes and street light charging points

DPM2x16FP_D00296_01_M_XXEN/09.2017

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Photos: Bender archive

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1. Important information

1.1 How to use this manual

*This manual is intended for **qualified personnel** working in electrical engineering and electronics!*

Always keep this manual within easy reach for future reference.

*This symbol denotes information intended to assist the user in making **optimum use** of the product.*

1.2 Technical support: service and support

Technical support by phone or e-mail for all Bender products

- Questions concerning specific customer applications
- Commissioning
- Troubleshooting

Telephone:	+49 6401 807-760*
Fax:	+49 6401 807-259
In Germany only:	0700BenderHelp (Tel. and Fax)
E-mail:	support@bender-service.de

*Available from 7.00 a.m. to 8.00 p.m. 365 days a year (CET/UTC+1)

1.3 Delivery conditions

Bender sale and delivery conditions apply. These can be obtained from Bender in printed or electronic format.

1.4 Inspection, transport and storage

Inspect the dispatch and equipment packaging for damage, and compare the contents of the package with the delivery documents. In the event of damage in transit, please contact Bender immediately. The devices must only be stored in areas where they are protected from dust, damp, and spray and dripping water, and in which the specified storage temperatures can be ensured.

1.5 Disposal

Abide by the national regulations and laws governing the disposal of this device. Ask your supplier if you are not sure how to dispose of the old equipment. For more information on the disposal of Bender devices, refer to our homepage at www.bender.de -> Service & support.

1.6 Intended use

This manual provides a description of the Display module, which can only be used in combination with Bender charge controllers. The charge controller is designed for use in electric vehicle (EV) charging stations, wall boxes and street light charging points. This document should be used together with the Charge Controller operating manual(s), which can be downloaded from: www.bender.de/en/service-support/downloads.

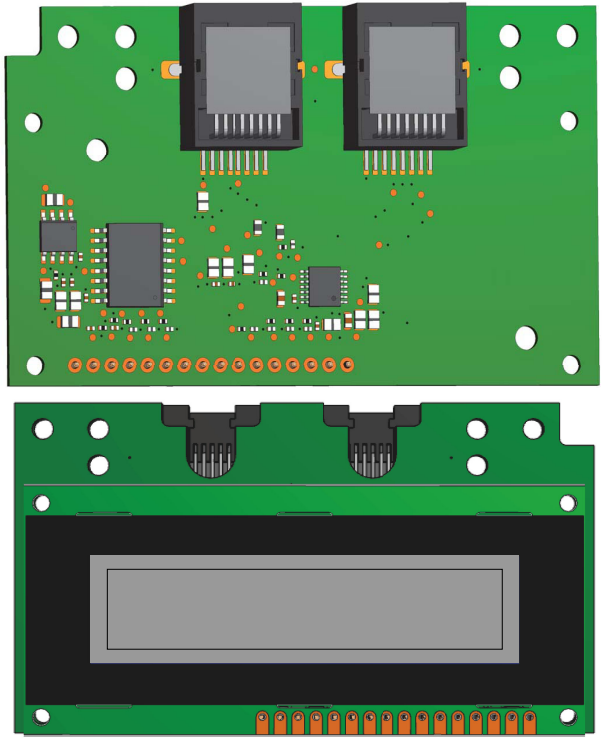
The Display module is a separate board and displays the current status information as well as the charge status. The Display module can be connected to the charge controller, the main component of a charging point, using a standard **RJ45 cable**. The second RJ45 cable can be connected to the RFID module.

CAUTION

Electrostatic discharge (ESD) may cause damage to electronic components. Observe precautions for handling electrostatic sensitive devices according to DIN EN 61340-5-1 and DIN EN 61340-5-2.

2. Display module

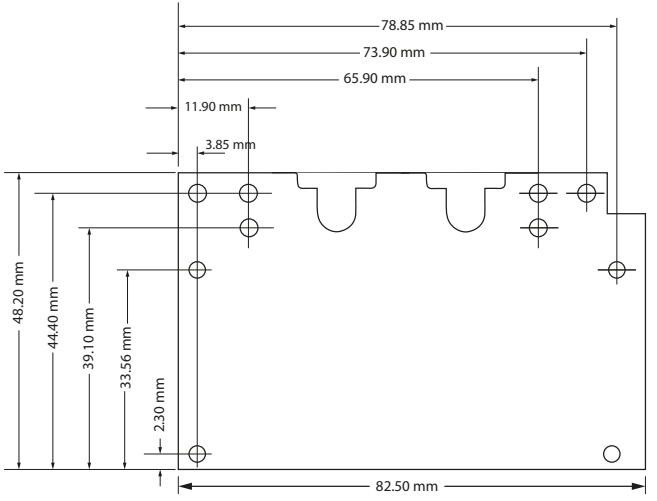
The Display is controlled via the CC612 charge controller. The Display module shown below contains an LED display with 2 x 16 characters and two RJ45 interface sockets.



The Display module can be connected to the charge controller, the main component of a charging point, using a standard **RJ45 cable**. The second RJ45 cable interface socket is used to connect to the RFID module. The CC612 and the RFID module can be connected using either RJ45 cable interface socket. The RJ45 sockets are interchangeable.
The power supply is taken from the available RJ45. The voltage ranges correspond to the bus system of the CC612. Software control of the Display module is carried out via the CC612.

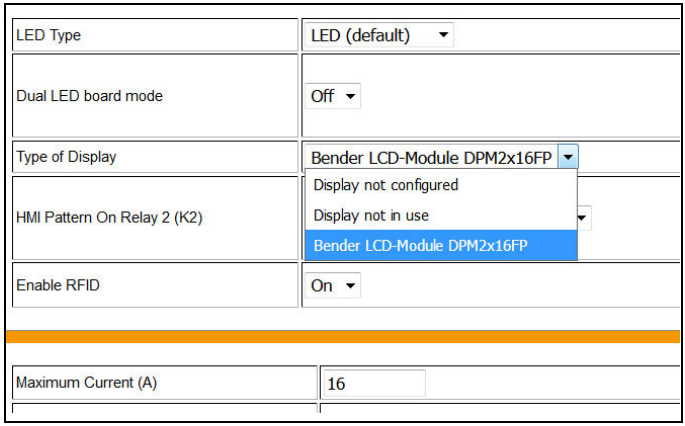
The maximum length of the RJ45 cable is 1 meter.

2.1 Dimensions for mounting

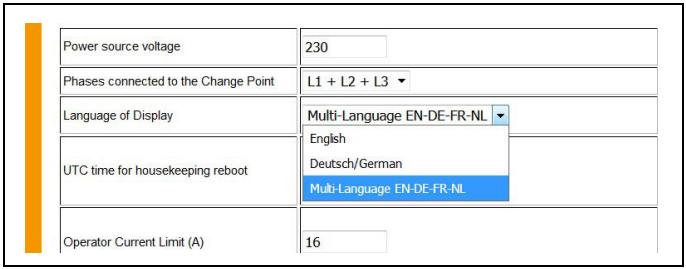


3. Display texts on the Display module

The display is selected under the menu item "Type of Display" on the **Manufacturer page** (URL: http://192.168.123.123/manufacturer).



The preferred display language is selected under the menu item "Language of Display" on the **Operator page** (URL: http://192.168.123.123/operator). The selectable languages are English, German and a multiple language option consisting of English, German, French and Dutch.



The Display module displays the following text:

Status: Error

English:	"General system error"
German:	"Allgemeiner Systemfehler"
Multi-Language:	"General system error" "Allgemeiner Systemfehler" "Erreur système non spécifiée" "Algemene systemfout"

Status: Idle

English:	"Available"
German:	"Frei"
Multi-Language:	"Available - Frei- Libre - Gereed"

Status: Idle vehicle detected

English:	"Please authorize..."
German:	"Bitte autorisieren..."
Multi-Language:	"Please authorize..." "Bitte autorisieren..." "Veuillez autoriser..." "Gelieve te autoriseren..."

Status: Reserved

English:	"Reserved"
German:	"Reserviert"
Multi-Language:	"Reserved - Reserviert" "Réservé " "Gereserveerd"

Status: Reserved vehicle detected

English: "Please authorize..."

German: "Bitte autorisieren..."

Multi-Language: "Please authorize..."
"Bitte autorisieren..."
"Veuillez autoriser..."
"Gelieve te autoriseren..."

Status: Authenticating

English: "Processing authorization..."

German: "Autorisierung läuft..."

Multi-Language: "Processing authorization..."
"Autorisierung läuft..."
"En attente de autorisation..."
"Autorisatie in behandeling…"

Status: Authorized no vehicle

English: "Vehicle not connected..."

German: "Auto nicht eingesteckt..."

Multi-Language: "Vehicle not connected..."
"Auto nicht eingesteckt..."
"Aucune connexion avec la voiture"
"Auto niet verbonden"

Status: Charging

English: "Charging for: x d:y d"
"Charging for: 1 day y h"
"Charging for: x days y h"
"Charging more than 99 days"

German: "Lädt seit: x d:y d|"
"Lädt seit: 1 Tag y h|"
"Lädt seit: x Tagen y h|"
"Lädt seit mehr als 99 Tagen"

Multi-Language: "Charging for: x d: y d"
"Lädt seit: x d:y d"
"Chargement en c. depuis x d:y h"
"Bezig met laden sinds: x d:y d"
"Charging for: 1 day y h"
"Lädt seit: 1 Tag y h"
"Chargement en c. depuis 1jour y h"
"Bezig met laden sinds 1 dag y h"

"Charging for: x days y h" (h = hours)
"Lädt seit: x Tagen y h"
"Chargement en c. depuis x j. y h"
"Laadt gedurende x dagen y h"

"Charging more than 99 days"
"Lädt seit mehr als 99 Tagen"
"Chargement plus de 99 jours"
"Laadt gedurende meer dan 99 dagen"

Status: Unavailable

English: "Not operational"

German: "Ausser Betrieb"

Multi-Language: "Not operational/Ausser Betrieb"
"Hors service/Buiten gebruik"

4. Technical data

4.1 Tabular data

Insulation coordination acc. to IEC 60664-1/IEC 60664-3

Rated voltage ..... 12.5 V
Overvoltage category III
Pollution degree 2
Rated impulse withstand voltage ..... 800 V
Rated insulation voltage ..... 12.5 V
Altitude ..... ≤ 2000 m above sea level

Nominal voltage/nominal current

Nominal voltage DC 3.3/5 V
Nominal voltage tolerance ..... ± 5 %
Nominal current < 100 mA

Environment/EMC

EMC ..... EN 61851-22
Operating temperature ..... -25 . . . +75 °C

Classification of climatic conditions acc. to IEC 60721:

Stationary use (IEC 60721-3-3) 3K5 (except condensation and formation of ice)
Transport (IEC 60721-3-2) 2K3
Long-term storage (IEC 60721-3-1) 1K4

Classification of mechanical conditions acc. to IEC 60721:

Stationary use (IEC 60721-3-3) 3M4
Transport (IEC 60721-3-2) 2M2
Long-term storage (IEC 60721-3-1) 1M3

Connection

Connection to charge controller ..... via RJ45 cable
Connection to RFID module ..... via RJ45 cable
Cable length ..... < 1 m

Other

Brightness of display background illumination ..... to 0. . . 100 %
Bus I2C
Protection class IP00
Weight ..... 150 g

4.2 Standards, approvals, certifications

The RFID has been developed in compliance with:

- EN 61851-1 :2011
- EN 61851-22 :2002
- EN 61439-1 :2011 (pending)
- DIN IEC/TS 61439-7 :2014 (pending)

4.3 Ordering information

Type	Art. No.
DPM2x16FP	B94060120

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