

## FE-20

### Datasheet



The Fermata Energy FE-20, bidirectional DC fast charger pairs with Fermata Energy's proprietary V2X (vehicle-to-everything) software platform, making it possible for EV owners to earn money while their vehicle is parked. This charger is made exclusively for Fermata Energy by Heliox.

This grid-tied bidirectional system is able to reduce a customer's electric bill by providing stored energy to support the building load at strategic times, as well as earn more money by sending energy back into the grid when it has the greatest value to the local utility.

Bidirectional chargers unlock a wide variety of value streams from electric vehicles, reducing the Total Cost of Ownership for fleets. They also help to stabilize the utility grid and support the integration of renewable energy by providing energy storage more cost effectively than stationary batteries. Fermata Energy has teamed with Heliox to present this innovative product to the market and drive the EV industry and our electricity grid to a cleaner and more resilient future.

- Perfect for light commercial EV charging and demand response
- 20 kW Charging / Discharging
- Network connected to Fermata Energy's AI cloud computing to adapt to every installation
- Super-durable, powder-coated steel enclosure
- Wall mountable, or optional heavy duty ADA compliant pedestal for stand alone installations

AC (GRID) PORT	
Grid Type	North America, 3-Phase 5-Wire
Rated Power	20 kVA
Nominal AC Voltage	277 / 480 3Ø VAC
Operating Voltage Range	244-305 L-N VAC, 422-528 L-L VAC
Nominal Frequency	60 Hz
Cont. Operating Freq. Range	59.3 to 60.5 Hz
Default Power Factor	1.0 (Fully Programmable)
Max. Operating Current	27 A Per Phase
Required Overcurrent Protection	40 A
Max Feedback Current	188 A
DC (VEHICLE) PORT	
Rated Power	20 kW
Nominal DC Voltage	380 VDC
Operating Voltage Range	150-500 VDC
Maximum Operating Current	56 ADC
Maximum Voltage	500 VDC
Max. Input Short Circuit Current	1990 A
ENVIRONMENTAL	
Operating Temp. Range	-30° to 50° C
Storage Temp. Range	-30° to 70° C
Enclosure Rating	Type 3R / Rainproof
Cooling	Forced Air
MECHANICAL	
Dimensions	37"H x 29.9"W x 11"D (940 x 760 x 279)
Weight	196 lbs (89 kg)
Cable Length	12 ft (3.6 m)
Mounting Type	Wall or Pedestal
COMMUNICATIONS	
Charging Protocol	CHAdEMO and CHAdEMO V2H/L
User Interface	Multicolor LED / Online Dashboard
Networking	Wired Ethernet (LAN)
Protocol	OCPP 1.6J + V2X extensions, TCP/IP
REGULATORY	
UL E-File Number, E522590	UL1741-SA, UL9741, UL 1998, IEEE 1547