



**LEAN
WATTS**

QUARK SERIES LITHIUM ION BATTERY CHARGER

Quark 1000W -1500W - 48V Nominal *

Quark Series chargers are designed to be reliable for everyday use with your electric vehicle. These waterproof chargers are very efficient and compatible to charge most of the vehicles with CAN communication.

Best of the class

This compact but powerful charger is CAN compatible charger for two wheeler, three wheeler and other Light Electric vehicles. Thoughtfully designed to be aesthetic and functional.

Designed for multi- Functionality

Quark series has a rugged interior housing which can be used as on-board charger and with a beautifully designed cover and a handle ,it can be used as a portable charger which can be carried everywhere.

Future proof

with optional WIFI + Bluetooth capability, you will be able to control the charging of your electric vehicle as per your demand

Customizable

Charger comes in all variants and is customizable from voltage, output current to housing and connectors



All weather compatible

Quite simply, this charger with sealed housing and forced air cooling is created to be used across the harshest of the places

* The chargers can be designed for 60V, 72V nominal battery packs also

The information contained in these documents is confidential, privileged and only for the information of the intended recipient and may not be used, published or redistributed without the prior written consent of Leanwatts India Private Ltd.

Specifications



Input	Quark 1000	Quark 1200	Quark 1500
AC input voltage range	100-270 VAC		
AC Input frequency	50 Hz		
Power Factor	>0.98 @230V		
Nominal AC input current	4.8A @230V	8.8A @230V	7.2A @230V
Output	Quark 1000	Quark 1200	Quark 1500
Nominal DC power	1000 W	1200 W	1500 W
Efficiency	Peak 92%		
DC Voltage range	40V - 60V		
DC Current range	0 - 16.5A	0 - 20A	0 - 25A
Charging algorithm	Customized as per requirement (CC/ CV / CP/ Float charging modes)		
Protection and Safety	Quark 1000	Quark 1200	Quark 1500
Under Voltage	Yes		
Over Voltage	Yes		
Over current	Yes		
Input Fuse	Yes		
Reverse Polarity	Yes		
Short circuit	Electronically limited		
Post charging cutoff	Yes		
Cooling	Forced Convection		
Over Temperature	Derated performance		
Surge Protection	6kV L-L, L-N and L-E MOV		
Inrush limiter	NTC limiter		
Dimensions and weight	Quark 1000	Quark 1200	Quark 1500
Enclosure Length	295mm		
Enclosure Width	135mm		
Enclosure Height	85mm		
Weight	2.3 Kg		
Environmental	Quark 1000	Quark 1200	Quark 1500
Sealing	>IP66	>IP66	>IP66
Operating temperature (Rated performance)	-10°C to 50°C	-10°C to 50°C	-10°C to 50°C
Storage temperature	-20°C to 80°C	-20°C to 80°C	-20°C to 80°C
Operating conditions	Outdoor/ Indoor		
Cables and Connectors	Quark 1000	Quark 1200	Quark 1500
Input connector	Indian 6A/ 15A plug (customizable as per requirement)		
Output connector	IEC 62196-6 (customizable as per requirement)		
Input AC cable	minimum 1 metre (customizable as per requirement)		
Output cable	minimum 1 metre (customizable as per requirement)		
Other Features	Quark 1000	Quark 1200	Quark 1500
LED indication	RGB LED indication		

- Please note that above specifications will be changed/ updated as per testing and certification details
- We can customize the Voltage as per the vehicle/ battery pack requirement