

# NEO

Datasheet - PREMIUM SMART CHARGING



www.raedian.com



### 1. General

### **Charging connector**

IEC 62196 Type 2 cable 5m, Type 2 socket, Type 2 socket with shutter

### **Authentication methods**

Plug & Charge RFID RAEDIAN APP via BLE OCPP Backend

### **HMI & indication**

**Dual LED stripes** 

## Display

OLED display with status indicator and metering information

# Nominal output voltage

Single phase: 230VAC ± 20% Three phase: 230/400VAC ± 20%

### Maximum output power

Single phase up to 7.4kW. Three phase up to 22kW with downgrade compatibility

### **Earthing system**

TN/TT/IT

### **Protection**

UVP, OVP, OCP, Relay Stuck, Over Temperature

# **Residual current protection**

At least Type A RCD upstream + Integrated 6mA DC per IEC 62955

# **Nominal frequency**

50/60Hz

# **Metering accuracy**

Calibrated ± 1% Accuracy

# 2. Connectivity

# Vehicle communication

Mode 3 in accordance with IEC 61851-1 ed. 3 (2017)

### **RFID** authentication

ISO/IEC 14443A/B, 13.56 MHz Maximum length: 7 bytes

# Connectivity to backend

Wi-Fi: 2.4GHz, 802.11 b/g/n 4G: LTE CAT I, LTE-FDD: B1/3/5/7/8/20/28

# **Backend protocol**

OCPP 1.6(JSON) 2nd edition

# Connectivity to EMS/Meter

Modbus RTU via RS-485

# Connectivity to smart phone

Bluetooth

### SIM card

Two SIM options:

- User SIM: Nano SIM, Settable APN user name and password
- eSIM: Integrated, activated by Lifetime Connectivity Key

# 3. Load Management Options

- Direct connection to CT Clamp for Dynamic Load Balancing;
- Connect to SC Kit for Dynamic Load Balancing and Solar Charging;
- Connect to external EMS as Modbus RTU secondary via RS-485;
- · OCPP backend load management;
- Static load management setting in RAEDIAN APP, RAEDIAN Install APP.

# 4. Operating Conditions

### **Operating temperature**

-30 ~ 55°C with derating mechanism

# **Relative humidity**

5% ~ 95%

# **Electrical safety class**

Class I

# Degree of protection (housing)

Charging core: IP55
Between charging core and backplate: IP54

# IK protection (mechanical impact)

IK10

# **Operating altitude**

3000m

# Standby power

3.86W

### **Environmental conditions**

Indoor / outdoor use

### **EMC Environmental conditions**

Class B residential according to IEC 61851-21-2

# 5. Mechanical

# **Mounting options**

Wall mounted Pedestal

### **Material**

Polycarbonate, UV resistant and flame retardant, UL94 5VA

# Casing (exterior) dimensions (H x W x D)

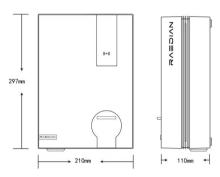
297 x 210 x 110 mm

# Packaging dimensions (H x W x D)

450 x 360 x 230 mm (socket variant) 490 x 650 x 230 mm (cable variant)

# Weight

4.3 - 7.2 kg



# 6. Compliance

### Safety

EN 61851-1, EN 62955, EN 62196, EN 61439

### **EMC**

EN 61851-21-2:2021

EN 301489-1 V2.2.3:2019

EN 301489-3 V2.3.2:2023

EN 301489-17 V3.2.5:2022

EN 301489-52 V1.2.1:2021

### RED

EN 300328 V2.2.2:2019

EN 300330 V2.1.1:2017

EN 301908-1 V15.1.1:2021

EN 301908-13 V13.2.1:2022

### Health

EN 62311:2008

EN 50663:2017

EN 61000-6-2:2016

EN 61000-6-3:2006

### RoHS

Directive 2011/65/EU &(EU)2015/863 Annex II



# **Available Colors**

Metal

Metallic Silver

Space Grey



Lunar Light



Passion Red



# **Product Variants**

# WIFI + BLE

Model	Part no.	Description
□ NEO 7-T5-S-0000	9100000001113	7kW, Cable 5m, WiFi, BLE, RFID, OLED, CT, Silver
□ NEO 7-S-S-0000	9100000001213	7kW, Socket, WiFi, BLE, RFID, OLED, CT, Silver
□ NEO 7-SS-S-0000	9100000001313	7kW, Socket with shutter, WiFi, BLE, RFID, OLED, CT, Silver
☐ NEO 11-T5-S-0000	9100000001123	11kW, Cable 5m, WiFi, BLE, RFID, OLED, CT, Silver
☐ NEO 22-T5-S-0000	9100000001133	22kW, 5m cable,WiFi, BLE, RFID, OLED, CT, Silver

# 4G with User SIM / eSIM

Model	Part no.	Description
NEO 7-T5-ES-S-0000	9100000003113	7kW, cable 5m, WiFi, BLE, RFID, OLED, CT, 4G with USIM/eSIM, Silver
NEO 7-S-ES-S-0000	9100000003213	7kW, Socket, WiFi, BLE, RFID, OLED, CT, 4G with USIM/eSIM, Silver
NEO 7-SS-ES-S-0000	9100000003313	7kW, Socket with shutter, WiFi, BLE, RFID, OLED, CT, 4G with USIM/eSIM, Silver
NEO 11-T5-ES-S-0000	9100000003123	11kW, cable 5m, WiFi, BLE, RFID, OLED, CT, 4G with USIM/eSIM, Silver
NEO 22-T5-ES-S-0000	9100000003133	22kW, cable 5m, WiFi, BLE, RFID, OLED, CT, 4G with USIM/eSIM, Silver

# NEO

### Rev 1.0 - 2024

# **DISCLAIMER**

- The reproduction, distribution and utilization of this document, as well as the communication of its contents to other parties without explicit authorization by RAEDIAN is strictly prohibited.
- The information in this document is for information purposes only, is provided as is, and may be subject to change without notice. RAEDIAN does not accept any liability for the correctness or completeness of the information and illustrations, and is not liable or responsible for your considerations, assessments, decisions or absence of such, or other use of the information in this document.

# **REMARK**

- All models listed are standard products. If you need products in other colors besides silver or have any customization needs, please feel free to contact RAEDIAN distributors or resellers.
- 2. The models marked with "" are in stock in EU. For further information like MOQ or other details, please feel free to contact RAEDIAN distributors or resellers.

# **Accessories**



### **Pedestal**

For charging station mounting

Pedestal with roof, double side installation, cable hook

- Dimension(HxWxD): 1,600 x 300 x 200 mm Color: Black
- Packaging(HxWxD): 1,610 x 360 x 210 mm
- · Weight: 11.6 kg
- · Material: Aluminium Alloy

Part no. 9006000000111



### **Wall Bracket**

Safe and secure installation on uneven surfaces

- Dimension(HxWxD): 338 x 205 x 11.5 mm
- Material: SPCC
- · Weight: 0.82 kg

Part no. 900700000001



### SC Kit



Part no. 902700000011

Solar Charging Kit for NEO 3ph 3P Meter Unit, 3 CT Clamps, 80A, 1:3000

Part no. 902700000032



# **CT Clamp**

CT clamp, 100A, 1:1000, 1m twisted pair cable

Part no. 900000000001

CT clamp, 50A, 1:1000, 1m twisted pair cable

Part no. 9000000000002





Multi color housing, front cover and backplate

Space Grey

Part no. 902800000001

Lunar Light

Part no. 9028000000002

Passion Red

Part no. 902800000006



## **RFID Card**

5\*RFID: RFID Card, Home, 5 Cards

Part no. 900300000001



## Cable Hook

Convenient for keeping your charging cable organized

- · Color: Black
- Weight: 0.106 kg

Part no. 900500000001



# **Charging Cable**



T2 to T2, 5m, 1-phase, up to 32A(7kW) T2 to T2, 7.5m, 1-phase, up to 32A(7kW) T2 to T2, 5m, 3-phases, up to 32A(22kW) T2 to T2, 7.5m, 3-phases, up to 32A(22kW) T2 to T1, 5m, 1-phase, up to 32A(7kW)

Part no. 9022000003211 Part no. 9022000001112

Part no. 9022000001111

Part no. 9022000001211

Part no. 9022000003111