Housing 21

Extra Care Facility

Kenmore Drive, Cleckheaton

Wheatley

Mechanical & Electrical Building Services

Summary of Electric Vehicle Charging Strategy

General:

Electric vehicle charging (EVC) is to be provided within the car parking area. for the charging of fully electric and other ultra-low emission vehicles in line with planning conditions for residential parking

The car parking area consists of 40No unallocated spaces. Each space is numbered and identified on the Architects plans and M&E Services Combined Below Ground Services Layout.

The EVC to be provided will therefore take the form of 2No Dual chargers 4No total) located between spaces 37/38 & 39/40. Associated cabling ductwork and access pits will be provided to accommodate the respective cabling to each unit.

In addition to the 2No charge points, facility will be provided for an additional 4No future points. This will be in the form of extended cable ducting and cable access pits. The locations allocated fall between spaces 29/30, 31/32, 33/34 & 35/36 respectively.

Schedule of EV Charge points

Parking Space 39 – Charge point-1

Parking Space 40 – Charge point-2

Parking Space 37 – Charge point-3

Parking Space 38 – Charge point-4

Parking Space 35 – (future)

Parking Space 36 – (future)

Parking Space 33 – (future)

Parking Space 34 – (future)

Parking Space 31 – (future)

Parking Space 32 – (future)

Parking Space 29 – (future)

Parking Space 30 – (future)

2No. 100Ø
DUCTS

50mm LTHW
PREINSULATED B

CANOPY OVER

C

A

C

1No 75Ø DUCT

A

1No 100Ø
DUCT

6No. 100mm CABLE DUCTS

1No 100Ø
DUCT

1No 75Ø DUCT

4No 100Ø DUCTS

5No 100Ø DUCTS

6No 100Ø DUCTS

C A

C A

C

1No 75Ø DUCT

C A

A

CP3

CP4

CP1

CP2

FUTURE

1No 100Ø
DUCT FUTURE

2No 100Ø
DUCTS FUTURE

3No 100Ø
DUCTS FUTURE

C

C

C

37

38

39

40

**(FUTURE
CP)**

**(FUTURE
CP)**

**(FUTURE
CP)**

**(FUTURE
CP)**

**(FUTURE
CP)**

**(FUTURE
CP)**

**(FUTURE
CP)**

**(FUTURE
CP)**

1No 75Ø DUCT

B

1No 75Ø DUCT

29

30

31

32

33

34

35

36

6No. 100mm CABLE DUCTS
FROM BASE OF FEEDER
PILLAR TO DRAW PIT

C

1No 75Ø DUCT

2No 150Ø DUCTS

A2

A2

1No 75Ø DUCT

A

A

1No 75Ø DUCT

DROP
OFF

A

A

C

A

28

27

26

25

24

23

22

21

20

RESIDENT / STAFF &
VISITOR PARKING

C

1No 75Ø DUCT

A

1No 75Ø DUCT

A

A

2

NOTE 2

A

BIN STORE

SUB
STATION

3

1No 75Ø DUCT

8

9

10

11

12

13

14

15

16

17

18

1No 75Ø DUCT

FOR BUILT ENVIRONMENT PROJECTS

The MaxiCharger Pillar is a floor-standing, smart, universal Type 2 socket EV charger that is available in single and dual-socket options. It is OCPP 1.6J compliant, has built-in PME fault detection on single and three-phase connection, and both static load management and dynamic load balancing capabilities.

Allowing EV drivers to charge with 7.4 kW charging speed, the MaxiCharger is an ideal charging solution for domestic and commercial requirements. The pillar housing is finished in a powder-coated steel with bespoke branding options available.

Product Code	Product Name and Description
EVMX74	MaxiCharger Smart Online AC Wallbox 7.4 kW - Socket (Black)
EVMX744G	MaxiCharger Smart 4G AC Wallbox 7.4 kW - Socket (Black)
EVMCSPP	MaxiCharger Single Pedestal Housing
EVMCDPP	MaxiCharger Dual Pedestal Housing

Please note that if opting for a dual MaxiCharger Pillar, x2 MaxiChargers are required. The same principle applies to 3-way and 4-way options.

Technical Specification	
Charging type	Mode 3, Type 2
Charging power	7.4 kW on single-phase
Rated current	32 A/16 A
Rated frequency	50 Hz
Input/output voltage	230 V+-10%: L1, N, PE
Network type	TT, TN
RCD	Integrated 6mA DC + 30mA AC leakage detection
Protection	Overcurrent, overvoltage, undervoltage, ground fault including DC residual current protection, integrated surge protection
PME fault detection	Incorporated within the unit

SEVADIS
POWERING ELECTRIC VEHICLES

User Interface	
Status indication	LED/APP
User interface	MaxiCharger APP, MaxiCharger Service Software, web portal
Connectivity	Bluetooth, Wi-Fi, Ethernet, 4G
Communication protocols	OCPP 1.6J
User authentification	APP, RFID card, QR code

General Characteristics	
IP and IK rating	IP54, IK08
Operating altitude	2000 m
Operating temperature range	-40°C ~ + 55°C
Storage temperature range	-40°C ~ + 85°C
Weight	3600 g
Dimensions (WxHxD)	Unit: 187 mm x 336 mm × 85 mm Pillar: 362 mm x 1197 mm x 270 mm

Software Update	
Software update	APP or web portal

Certification and Standards	
Safety standards	EN/IEC 61851-1, EN/IEC 62196-2, EN/IEC 62955, BS7671
Certification	CE, UKCA (TUV) Compliant to the Electric Vehicles (Smart Charge Points) Regulations 2021, inc. Schedule 1
Warranty	36 months

FOR BUILT ENVIRONMENT PROJECTS

The MaxiCharger is a wall or pedestal-mounted, smart, single-outlet universal Type 2 socket EV charger. It is OCPP 1.6J compliant, has built-in PME fault detection on single and three-phase connection, and both static load management and dynamic load balancing capabilities.

The MaxiCharger is robust, aesthetically pleasing, and suitable for all environments. Allowing EV drivers to charge with 7.4 kW charging speed, the MaxiCharger is an ideal charging solution for domestic and commercial requirements.

Product Code	Product Name and Description
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PME fault detection	Incorporated within the unit

User Interface	
Status indication	LED/APP
User interface	MaxiCharger APP, MaxiCharger Service Software, web portal
Connectivity	Bluetooth, Wi-Fi, Ethernet, 4G (SIM not included)
Communication protocols	OCPP 1.6J
User authentification	APP, RFID card, QR code

General Characteristics

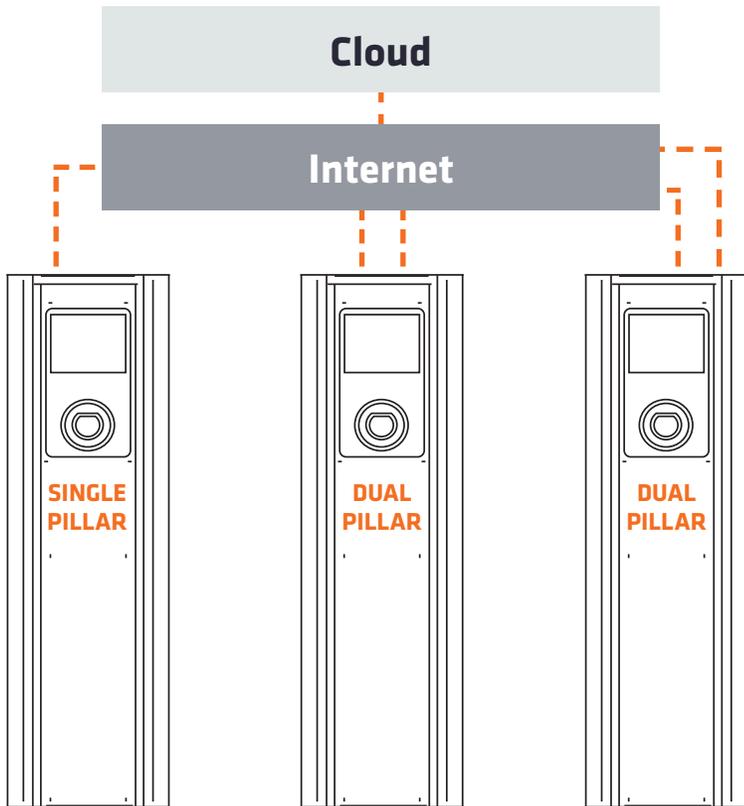|	
IP and IK rating	IP54, IK08
Operating altitude	2000 m
Operating temperature range	-40°C ~ + 55°C
Storage temperature range	-40°C ~ + 85°C
Mounting	Wall or floor using a pedestal
Weight	3600 g
Dimensions (WxHxD)	187 mm x 336 mm × 85 mm

Software Update

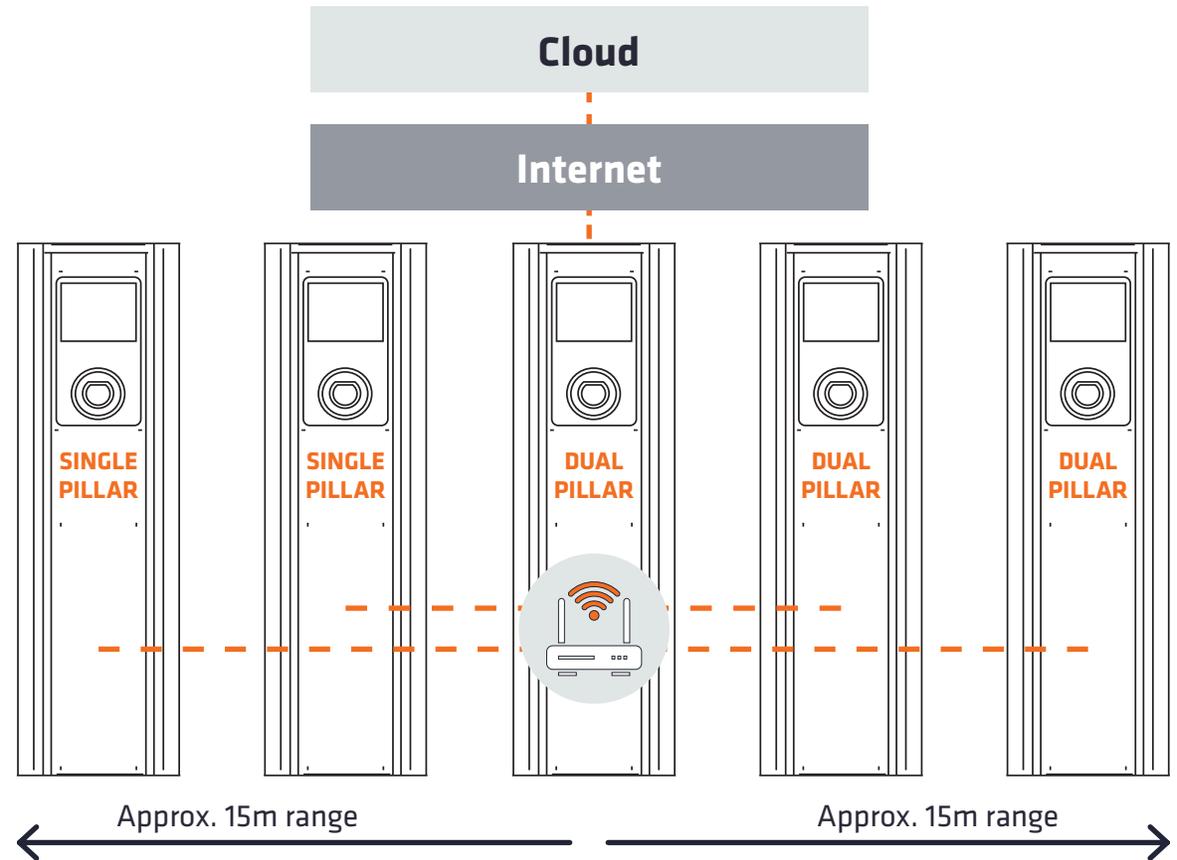|	
Software update	APP or web portal

Certification and Standards

Safety standards	EN/IEC 61851-1, EN/IEC 62196-2, EN/IEC 62955, BS7671
Certification	CE, UKCA (TUV)
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SEVADIS
POWERING ELECTRIC VEHICLES

Individual 4G SIM card per unit

Cloud

Internet

SINGLE PILLAR

DUAL PILLAR

DUAL PILLAR

4G data charges apply per outlet

Load balancing via cloud only

4G router/Wi-Fi repeater module

Cloud

Internet

SINGLE PILLAR

SINGLE PILLAR

DUAL PILLAR

DUAL PILLAR

DUAL PILLAR
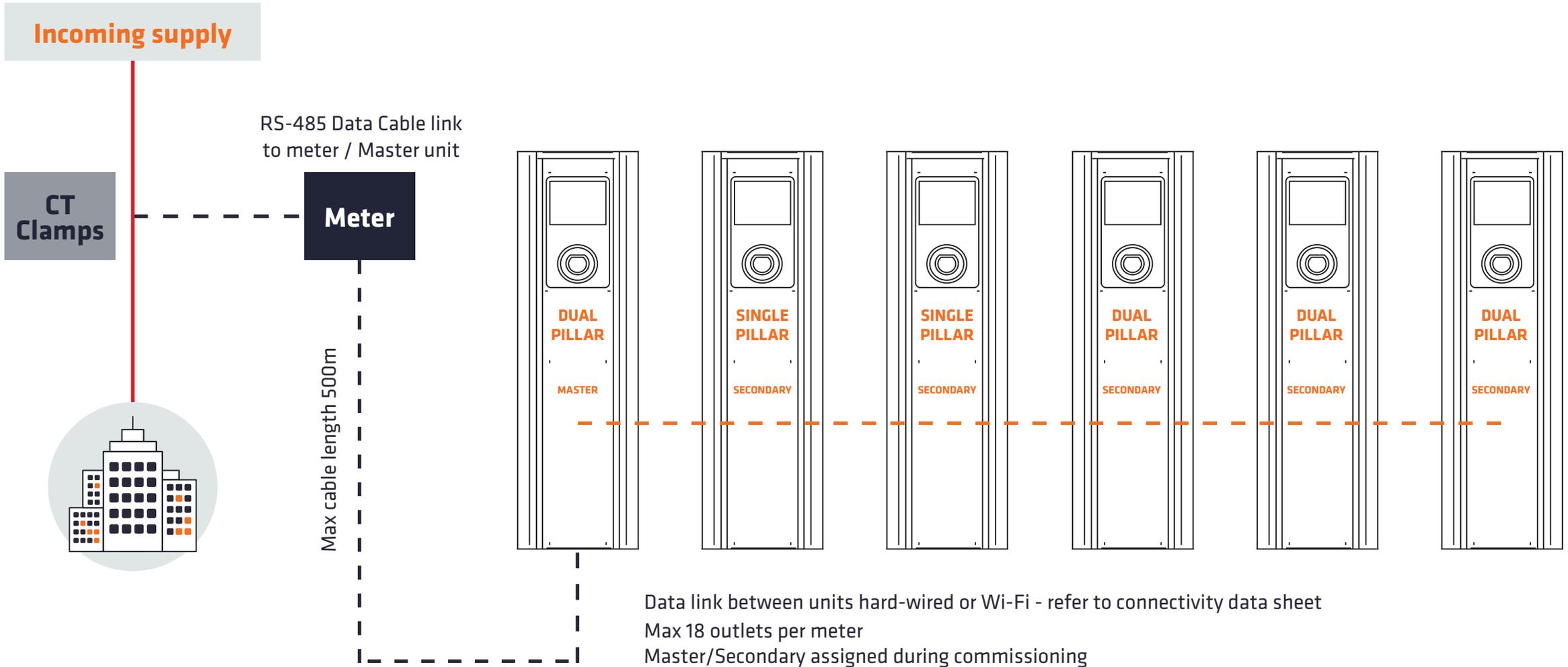
Approx. 15m range

Approx. 15m range

1x 4G data charge applies per router

Router requires IP rated 3-pin socket (by others)
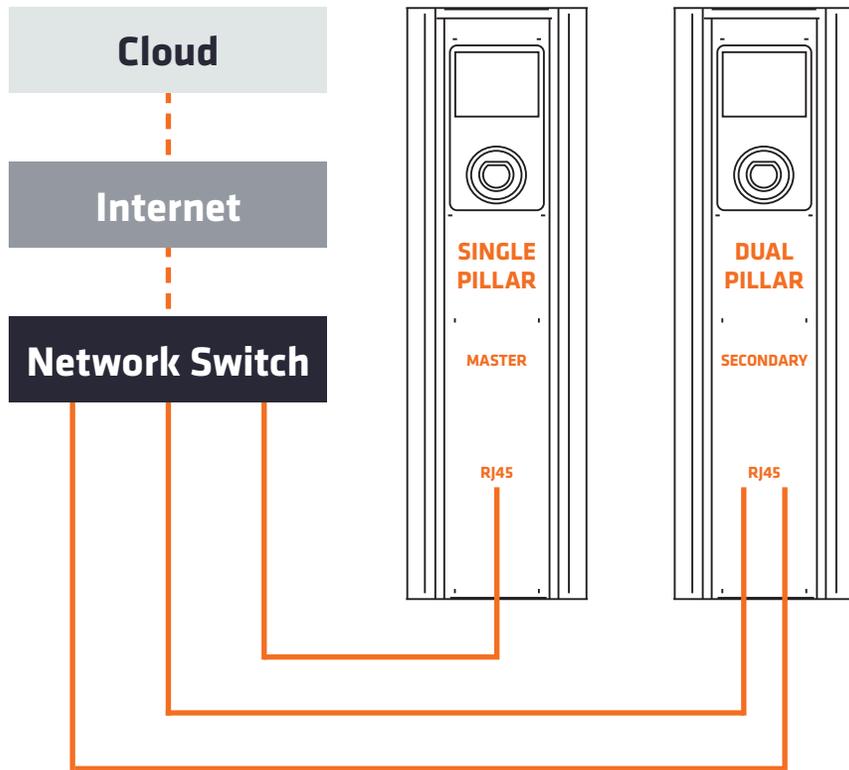
Ensure suitable 4G signal available on site

With active load balancing, power not being used by the building is sent to the charging group

Incoming supply

RS-485 Data Cable link to meter / Master unit

CT Clamps

Meter

Max cable length 500m

| DUAL PILLAR | SINGLE PILLAR | SINGLE PILLAR | DUAL PILLAR | DUAL PILLAR | DUAL PILLAR |
| MASTER | SECONDARY | SECONDARY | SECONDARY | SECONDARY | SECONDARY |

Data link between units hard-wired or Wi-Fi - refer to connectivity data sheet

Max 18 outlets per meter
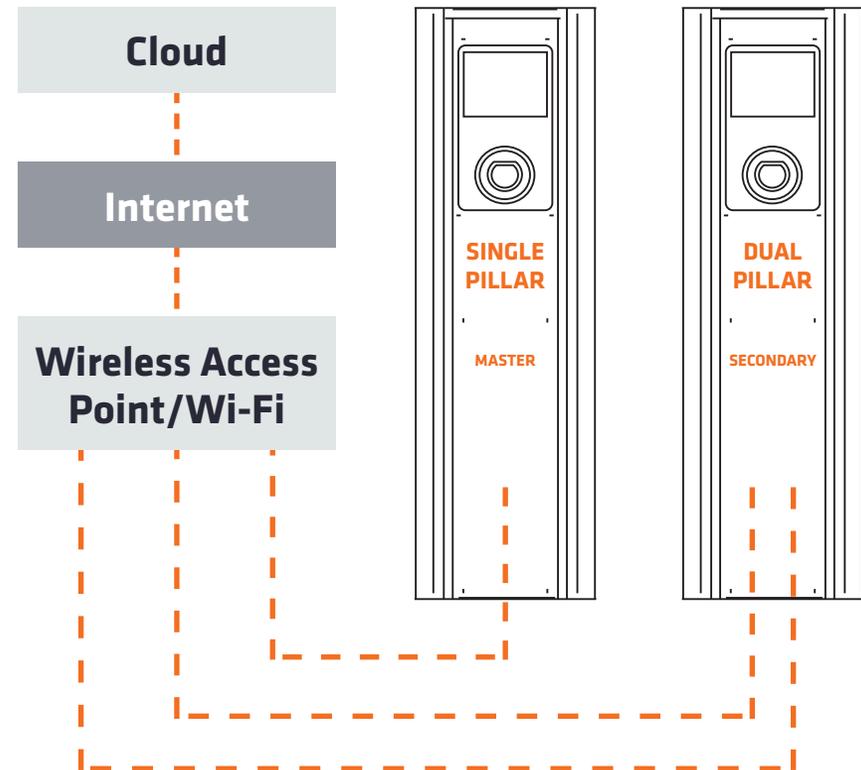
Master/Secondary assigned during commissioning

Hardwired data cable Cat 5/6 (one cable per outlet)

Single outlet pillar requires 1x cable

Dual outlet pillar requires 2x cable

Wi-Fi connection
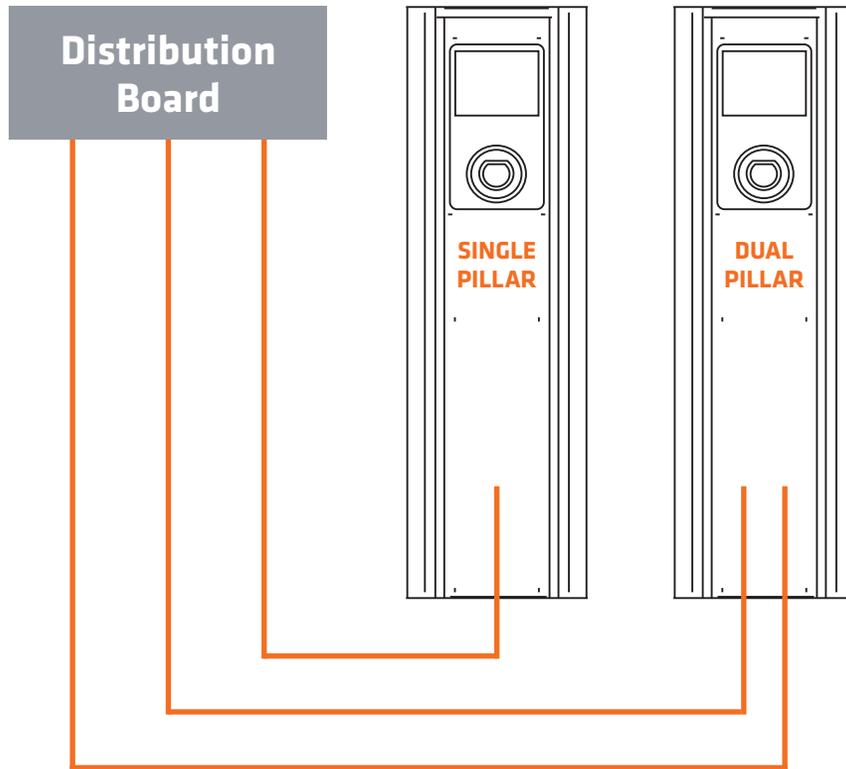## (ensure signal strength sufficient)

Cloud

Internet

Network Switch

SINGLE PILLAR

MASTER

RJ45

DUAL PILLAR

SECONDARY

RJ45

Max cable length 100m

Cloud

Internet

Wireless Access Point/Wi-Fi

SINGLE PILLAR

MASTER

DUAL PILLAR

SECONDARY

All outlets in a group must connect to the same network or Wi-Fi

Standard power connection (one feed per outlet)

Single outlet pillar requires 1x cable

Dual outlet pillar requires 2x cable

Splitter box version (single power feed)

Dual or quad outlet pillar requires 1x cable

Distribution Board

SINGLE PILLAR

DUAL PILLAR

Distribution Board

DUAL PILLAR

QUAD PILLAR

Splitter Box

Splitter Box

7.4 kW single phase supply / 11 and 22 kW three phase supply