



Bollards

X-Last EV Bollard



Applications:

Roadside EV Fast Charging Units

The Ubitricity EV charging system utilises the excess power in standard street lighting columns as its smart meter and payment system is housed within their unique cable connection. The NAL satellite bollard system has been developed as not all street lights are situated at the front of the footway or in the area where the charging unit is required. In these situations a power spur is taken from the street or sign light and ducted to the NAL Composite Socket and bollard.

A single EV connection is housed within the Bollard and the unique X-Last material allows the bollard to withstand multiple impacts without any loss of strength. Multiple bollard installations can be accommodated using an un-metered feeder pillar.

Advantages

- ◇ Utilises excess power from existing street or signal lights
- ◇ Smart cable eliminates the need for meter or comms connection
- ◇ Satellite Ubitricity EV charge unit installed in your specific location
- ◇ Simple connection from existing street or sign light
- ◇ Ideal for roads where; no street lights, not enough street lights or street lights in the wrong location for roadside charging
- ◇ Option of multiple installations from feeder pillar
- ◇ Street light power – 5.8kw or feeder pillar power – 7kw
- ◇ Single or dual socket option
- ◇ Flexible X-Last bollard withstands all multiple without loss of strength
- ◇ Robust composite socket allows rapid removal and replacement for future upgrades



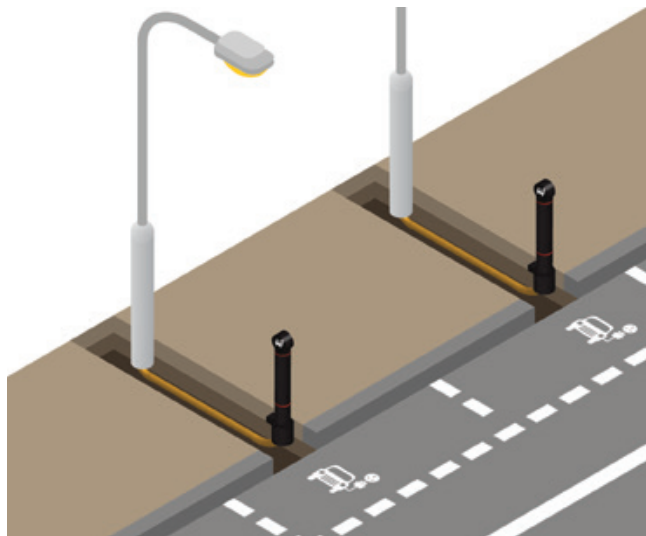
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Installation Options

Option 1

In sites where the lighting columns are positioned at the back of the footway the X-Last EV satellite bollard can be installed on the carriageway side of the footway thus eliminating the trip hazard risk from charging cables.

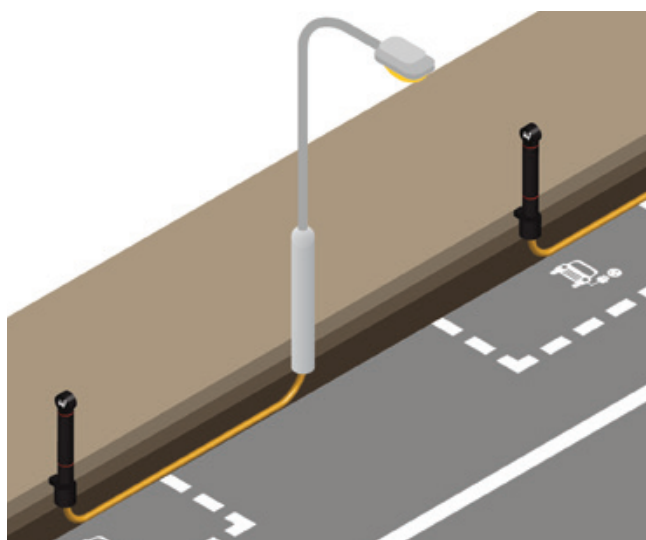
The bollard and socket is connected to the lighting column via short underground duct run.



Option 2

In sites which require a great amount of EV charge points than there are lighting columns, the X-Last EV satellite bollard can be installed in between the lighting column positions.

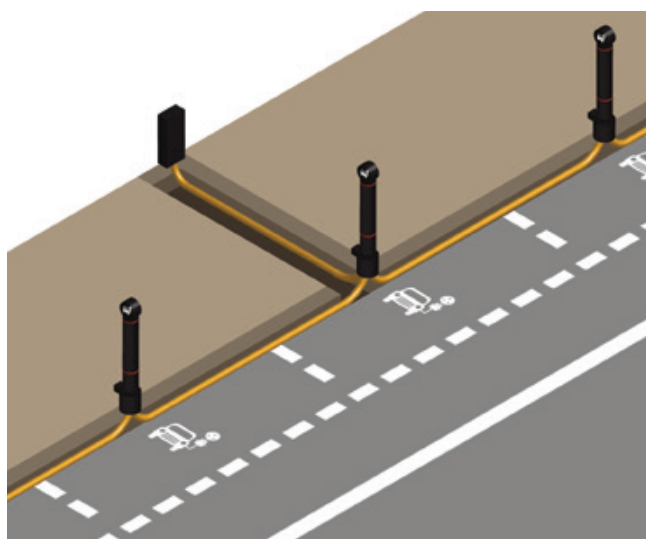
Bollard's are connected to the nearest lighting column via a short underground duct run.



Option 3

In sites which have no lighting unit and require multiple EV charge units, X-Last EV satellite bollard's can be installed in the required locations.

The bollards are connected to an un-metered feeder pillar which is installed in close proximity.



X-Last Bollard Product Specification

Material: Elastomeric polymer

Base Colour: Impregnated in polymer material

Surface Finish: Elastic coated, UV, impact, abrasion, moisture and weather resistant

Coating adhesion: DIN EN ISO2409

Working Temperature: -20 C to +60 C

Rigidity: 380Kgs to bend to 90

X-Last Bollard Purchase Specification

Bollards will be manufactured from X-Last polymer with RAL colour base coat impregnated into the material. Top colours will be painted using elastic coatings.

The bollard will be available without or with sign housing which must be double sided and accept any sign face in RA2 material.

Bollards will be passively safe and have been tested with a HIC (head injury criterion) value of under 600.

After vehicular impact of up to 80kph the bollard will return to its upright planted position. It will take 380kgs of pressure to fold the bollard to 90.

X-Last bollards to be manufactured to the above specification by NAL Ltd.

Composite Socket Specification

Composite Sockets to be manufactured to suit base design of all 150mm X-Last Bollards designs.

Depth of socket must be no greater than 202mm.

Bollards must be locked into the socket with a 128mm steel pin.

The securing pin must be housed in a lockable recessed side chamber which is flush with the surrounding surface.

Recessed side chamber covers must be locked in place with M8 stainless steel T-key fixing.

Sockets must be able to withstand unlimited vehicle impacts to the X-Last Bollards.

Pedestrian plugs must be tested to Class B BS5834-2: 2011.

Cable and Plug Specification

Material: PCABS

Protection class: IP55

Dimensions of metering units: 270 x 89 x 56 mm (HxBxD)

Weight: 2,35 kg (incl. cable)

Cable length: ca. 5,5 m (7 m upon request)

Plugs Infrastructure-based: Type 2 IEC 62196-2 (VDE-AR-E 2623-2-2)

Onboard Plug Connector: Type 2 IEC 62196-2 (VDE-AR-E 2623-2-2) or Type 1 62196-2 (SAE J1772)

Charging Power: Max. 4,6 kW (230V, 1ph, 20A)

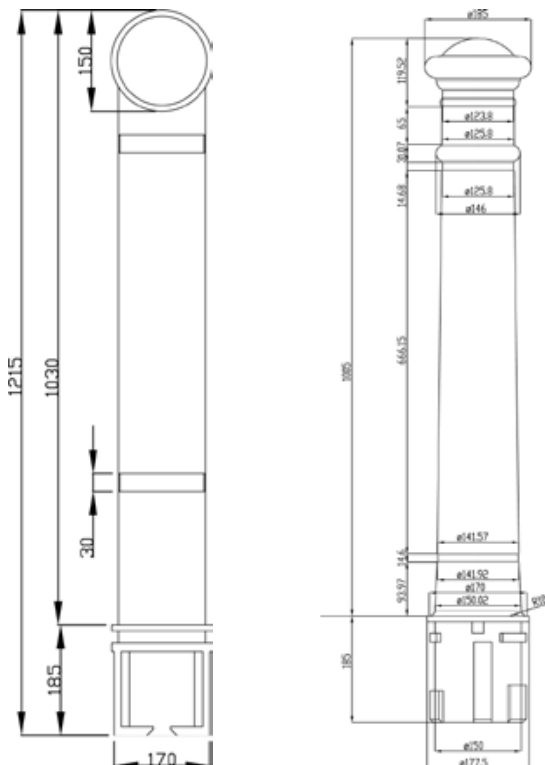
Charging Mode: Mode 3 according to IEC 61815-1

Standard: IEC 61815-1

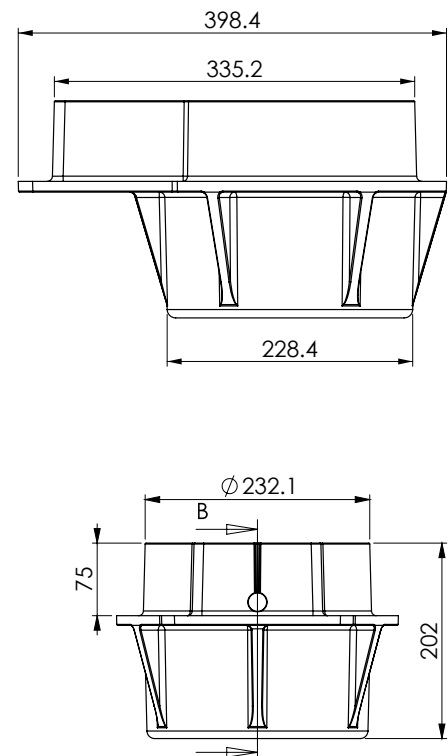
Integrated Energy Meter Specification

Legal Certification: An MID-certified energy meter made by inepro Metering and conform with legal standards is used within the SmartCable.

X-Last Nuvo Sign / X-Last Manchester



Composite Socket



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