Industry Application Report

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bulgin

Smart Meters.

A Smart Meter is an electronic device which is used to measure and record data covering a range of different data points - displaying this information clearly to the user in order to show consumption habits or general usage of voltage levels, currents, power, electricity, natural gas, water and heating.

Smart Meters come in a range of different formats and set-ups with some having an auxiliary back-up option thanks to the Bulgin BX0011/1 Battery Holder, which when used for emergency situations ensures the capturing of critical information continues (for example) in the event of a power failure.

⬡ Potential Markets: Domestic / Utilities

⬡ Bulgin's battery holder range caters for battery sizes: AAA(R03), AA(R6), C(R14), D(R20) and PP3(6R61), accommodating 1, 2, 3 or 4 cells

Products Related To This Industry:

BX0011/1

Battery Holders

AA/R6 Flanged Panel Mount Battery Holders For 1-3 Cells (Bayonet Cap With Coin Slot). Panel Mount Battery Holder. Solder Tags. Bayonet/Screwdriver release. – 30°C to +70°C Operating Temperature. UL94V-0 Flammability Rating. RoHS Compliant. Number of battery cells: BX0011/1, BX0012/1 & BX0013/1.

BXS/ 011 / 012 / 013/1

Battery Holders

AA/R6 Sealed Flanged Panel Mount Battery Holders For 1-3 Cells. IP67 Rated. Panel Mount Battery Holder. Front Panel Sealed to IP67 - Dust & Waterproof. Solder Tag. Bayonet Cap with Finger/Coin Release. –30°C to +70°C Operating Temperature. UL94V-0 Flammability Rating.

BXS/ 001 / 002 / 003/1

Battery Holders

C/R14 Sealed Panel Mount Battery Holders For 1-3 Cells, IP67 Rated. Panel Mount Battery Holder. Front Panel. Sealed to IP67 - Dust & Waterproof. Solder Tag. Screw Cap with Finger Release. –30°C to +70°C Operating Temperature. UL94V-0 Flammability Rating.

BXS / 016 / 017 / 018

Battery Holders

D/R20 Sealed Flanged Panel Mount Battery Holders For 1-3 Cells. IP67 Rated. Panel Mount Battery Holder. Front Panel Sealed to IP67 - Dust & Waterproof. Solder Tag. Bayonet Cap with Finger Release. –30°C to +70°C Operating Temperature. UL94V-0 Flammability Rating.

Ticket Stations.

Ticket Stations or Ticket Vending Machines (TVMs) are computer systems that allow the vending of paper or electronic based tickets across a wide range of different applications ranging from car parks and railway stations to cinemas and amusement parks. Car parks are a notable example of such a system as unmanned ticket stations are used for the purchasing of printed or electronic tickets for the right to park for a selected duration.

Car park ticket stations require tough, durable and functional switches to operate effectively as they are often situated outside exposed to the elements, whilst also being subjected to a vast number of interactions by the public. Such a demand is met by Bulgin and Arcolectric's wide range of Vandal Resistant Switches which rise to the requirements perfectly.

⬡   **Potential Markets: Retail / Vending Machines**

⬡   **Bulgin's extensive range of Vandal Resistant security Switches are designed with a high resistance to wear and tear, corrosion and harsh use in potentially hostile environments**

Products Related To This Industry:

MP0037

Vandal Resistant Switch

Stainless Steel Low Profile Vandal Resistant Push Button Switches. Choice of switch operations, diameters & IP ratings depending on part code. Solder Tag Termination except for MP0037 (Screw Terminal). Where an IP rating is shown, switch is front panel sealed to IP rating given, microswitch is not sealed.

MPI001 Series

Vandal Resistant Switch

22mm diameter bezel. 19.2mm Panel Cutout Single pole. Push to make tactile (momentary action). Choice of Termination depending on part code: /28 - 2.8mm Tab. /TE or /TERM - Screw Terminal. /RP - Solder Tag. /FL - 300mm Flying Leads; white - switch, red - LED +, black - LED.

MPB Series

Vandal Resistant Switch

Brass Chrome Plated Low Profile Vandal Resistant Push Button Switches. Choice of switch operations, diameters & IP ratings depending on part code. Solder Tag except for MPB037 (Screw Terminal). Where an IP rating is shown, switch is front panel sealed to IP rating given, microswitch is not sealed.

MP0050 Series

Vandal Resistant Switch

Stainless Steel Large Diameter Vandal Resistant Push Button Switches. Front panel sealed to IP66 (microswitch is not sealed). 32mm diameter. Solder Tag. Choice of Low Profile (MP0050) or Protruding Profile (MP0050/2).
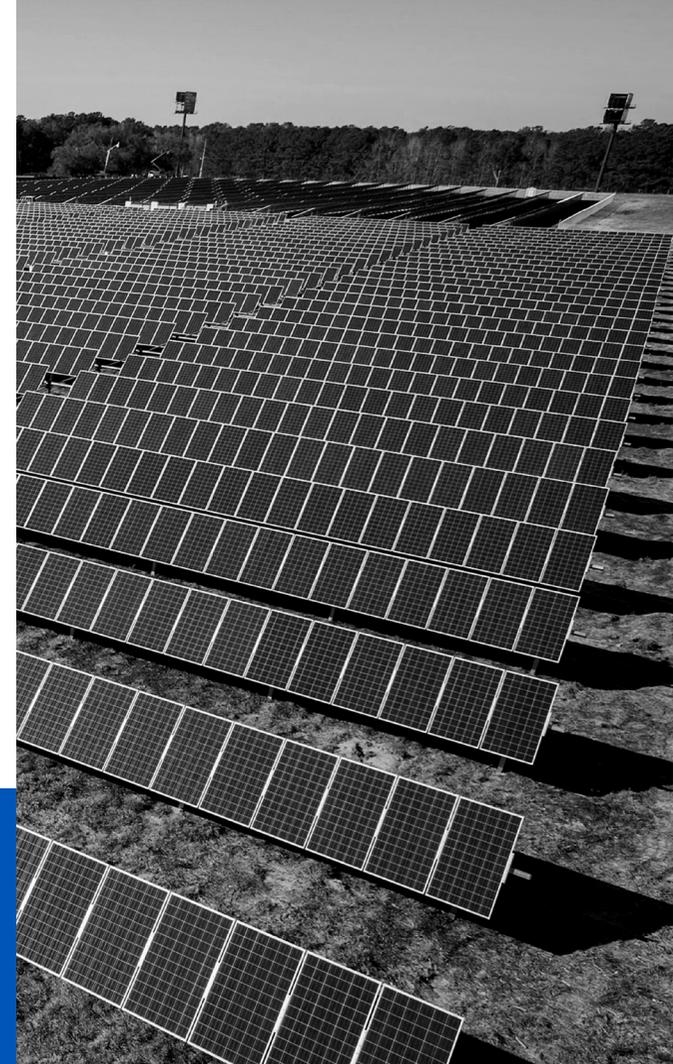
Solar PV Combiner Boxes.

Solar Combiner Boxes are a key aspect to any Solar setup or project and act as a interconnection between the incoming power from the source, which when received is consolidated down to one main feed and then distributed outwards. The main role of a Solar Combiner Box is to also add protection to prevent any over voltage or current flowing and causing issues throughout the solar system.

Many solar farms are located outside and subjected to various weather conditions, and because of this Combiner Boxes are also subjected to the same harsh environments. The Bulgin 400 Series has been designed into many Solar PV Combiner Boxes which pull together the output of multiple PV Modules for connections to the inverter.

⬡   Potential Markets: Wind Farms / Other Renewable's

⬡   Taking a selection of great features and specifications from the larger Buccaneer family, the 400 Series Miniature Power Connectors condenses them into a compact form factor giving engineers greater flexibility

Products Related To This Industry:

PX0410 🌐

400 Series Buccaneer

Flex Cable Connector. Water and dustproof to IP68 when mated with compatible connector. Pin or Socket. 2, 3, 4, 6, 8, 10 or 12 Pole. Crimp or Solder Contacts available (supplied separately). Choice of cable acceptance 3mm-7mm depending on part code. Mate with Flex In-Line or Panel Mount Connectors PX0401, PX0411, PX0412, PX0413.

PX0411 🌐

400 Series Buccaneer

In-Line Flex Cable Connector. Water and dustproof to IP68 when mated with compatible connector. Pin or Socket. 2, 3, 4, 6, 8, 10 or 12 Pole. Crimp or Solder Contacts available (supplied separately). Choice of cable acceptance 3mm-7mm depending on part code. Mate with Flex Cable Connectors PX0400, PX0402, PX0410.

PXS400 🌐

400 Series Buccaneer

Smart Connector with EEPROM PXS400. 400 Series Smart Overmould Prewired Connectors. 1 - wire EEPROM chip. Water and dustproof to IP67 when mated with compatible connector. Pin or Socket. 4, 6, 8, 10 & 12 Pole. Choice of Sealing Caps available separately to maintain IP rating of unmated connectors.

PX0413 🌐

400 Series Buccaneer

Rear Panel Mount Connector. Water and dustproof to IP68 when mated with compatible connector. Single hole fixing. Pin or Socket. 2, 3, 4, 6, 8, 10 or 12 Pole. PCB mount version (part codes suffixed /PC) use straight PCB spills (complete with pre-loaded gold plated contacts). Mate with Flex Cable Connectors PX0400, PX0402, PX0410.

Topography Equipment.

In basic terms Topography is the analysis and study of the surface of the land, accounting for its various features and shapes in relation to their arrangement across the specific area. A Topographical Survey gathers such data, whilst also taking into account any man-made features that may also be present in order to get an accurate assessment of the ground, its boundaries, spot levels and any contours or deviation in a terrain's elevation.

There are a range of different topographical surveys which can be carried out, all of which utilise their own set of equipment. One consistent factor however is that many surveys are normally carried out on rural or construction sites where harsh conditions such as muddy fields and steep terrain (often inaccessible to vehicles) are at play. Bulgin's SMB Buccaneer & 90° variant have been utilised to transmit data from Topography survey equipment for use in agriculture and farming industry.

⬡ Potential Markets: Construction / Surveying / Agriculture

⬡ Sealed to IP68 when mated and IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k.
50Ω Impedance SMB connector with a frequency range of 0-4GHz

Products Related To This Industry:

PX0407 / 408 / 409

400 Series SMB

SMB Antennas. Water and dustproof to IP68 when mated with compatible connector. Secure screw thread locking. Built-in half wavelength omnidirectional sealed antenna 90 degree bend (part codes suffixed /90). Straight (no part code suffix). SMB 50 Ohm interface. Choice of frequency bands depending on part code. Mate with PX0414 Panel Mount SMB Connector.

PX0416

400 Series SMB

Pre-Wired Flex SMB Connectors. Water and dustproof to IP68 when mated with compatible connector. Frequency range 0-4GHz. Overmoulded connector supplied with 50 Ohm impedance SMB plug terminated with RG-174 cable in a choice of lengths depending on part code. Mate with PX0414 Panel Connector.

PX0415/1

400 Series SMB

Rewireable SMB Connector. Water and dustproof to IP68 when mated with compatible connector. Frequency range 0-4GHz. Supplied with 50 Ohm impedance SMB plug. For RG-174 cable. 14319 hand crimp tool available separately Pre-wired connector also available (PX0416). Mate with Panel connector PX0414.

PX0414

400 Series SMB

Front Panel Mount SMB Connector. Water and dustproof to IP68 when mated with compatible connector. Frequency range 0-4GHz. Supplied with 50 Ohm impedance SMB plug terminated with RG-174 cable in a choice of cable lengths depending on part code (U.FL cable version also available on request). Mate with Flex Connectors PX0415, PX0416.

LED Marine Lanterns.

Marine Lanterns play a key role in the aiding of navigation within the marine environment through the use of visual light signals. Marine Lanterns can be used for a variety of different visual signalling to convey differing information, but regardless of location these key pieces of equipment require strong and reliable connections able to withstand the harsh conditions they may face.

Bulgin's Mini USB Buccaneer has been utilised within the main access port for the PC programming on such Marine Lanterns, fully utilising the accompanying IP rated Sealing Cap when not connected to maintain a healthy and stable connectivity solution.

⬡   Potential Markets: Marine / Transport

⬡   IP68 rated with IP69K tested in accordance with DIN. USB V2.0 performance with
    Plug and Play capability, shielded systems and overmoulded cables

Products Related To This Industry:

PX0457 / PX0458

400 Series Mini USB

Rear Panel Mount Mini USB Type AB Socket. Water and dustproof to IP68 when mated with compatible connector. Choice of Terminations depending on part code: PX0457 leaded, terminating in a 6 way header. PX0458 direct PCB Mount. PX0484 Sealing Cap available separately. Mate with PX0441, PX0442, PX0444 Cables.

PX0443 / PX0459

400 Series Mini USB

Front Panel Mount Leaded Mini USB Type B Socket. Water and dustproof to IP68 when mated. PX0443 has a 108mm lead terminating in a 5 way crimp connector for use with PC header (available separately). PX0459 is identical to PX0443 but with exposed braid for use with PX0464 screening can (available separately). Mate with PX0441, PX0442 Cables.

PX0456

400 Series Mini USB

Front Panel Mount Leaded Mini USB Type B Socket. Water and dustproof to IP68 when mated with compatible connector. 108mm lead terminating in a 6 way crimp connector for use with PCB header (available separately, part code 14563, 14564). PX0480 Sealing Cap available separately. Mate with PX0441, PX0442, PX0444 Cables.

Sealing Caps

400 Series Mini USB

Sealing Caps for 400 Series Power and Data Connectors. PX0480 fits PX0412, PX0414, PX0443, PX0456, PX0459 Series. PX0480/1 fits PX0401, PX0411 Series. PX0481 fits PX0400, PX0402, PX0410, PX0415 Series. PX0484 fits PX0413, PX0446, PX0447, PX0457, PX0458 Series. PX0485 fits PX0441, PX0442, PX0444 Series and PX0416.

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