

# Bond-Rite® REMOTE

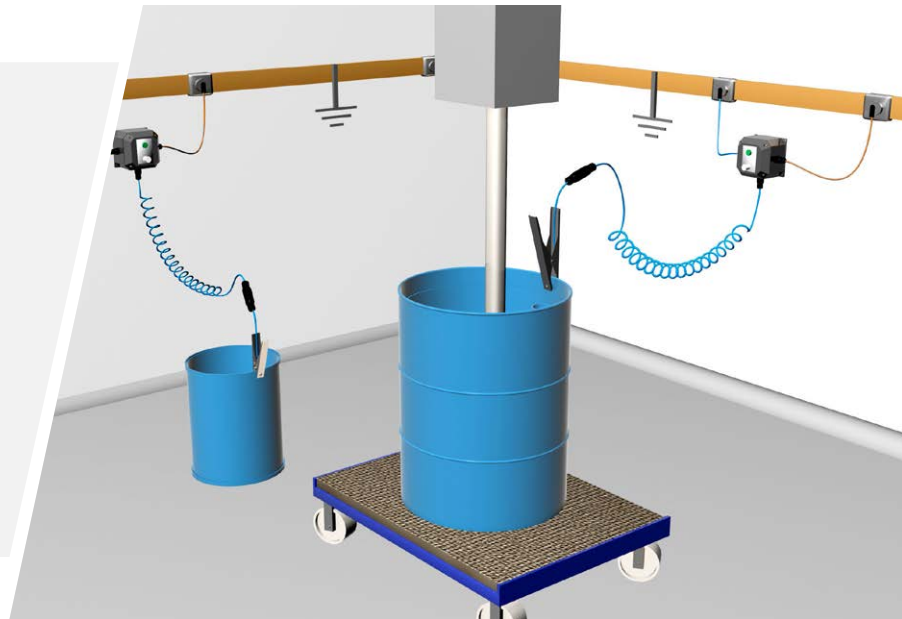
## Continuous Ground Loop Monitoring with Visual Indication



Online Inquiry >



*Bond-Rite Remote Static Dissipative GRP Enclosure*



The Bond-Rite REMOTE indicator station houses the ground loop monitoring circuit and a bright green LED which pulses continuously when it detects that the resistance between the conductive metal equipment to be grounded and the site's verified earth ground (e.g. copper tape) is 10 Ohms or less.

Once connected the Bond-Rite REMOTE continuously monitors the loop resistance of the circuit between the equipment and the verified ground point (e.g. wall-mounted earth bar).

The pulsing green LED provides process operators with a continuous visual reference point that enables them to monitor the ground status of conductive metal equipment capable of accumulating static electricity.

The standard GRP enclosure is static dissipative and suitable for general processing environments. The stainless steel enclosure is designed to cater for hygienic or corrosive environment specifications.

Both enclosures provide a minimum IP 66 degree of ingress protection and are suitable for both indoor and outdoor installation.

The Bond-Rite REMOTE can be powered with an intrinsically safe 9V battery (included) or an external 115 / 230 V AC power supply which can power up to 10 individual indicator stations.

The Bond-Rite REMOTE is an ideal solution for applications and installations where interlocks with the process are not possible or required.

#### **Please Note:**

The Bond-Rite REMOTE does not check if the site's verified earth grounding point is connected to the general mass of earth. It is the responsibility of the site owner to ensure that their installed ground network is connected to general mass of earth in line the relevant national standards.

### Typical Applications

- Filling and dispensing to/from metal containers, including drums, waste drums, mixing vessels
- Grounding equipment used in mixing and blending operations

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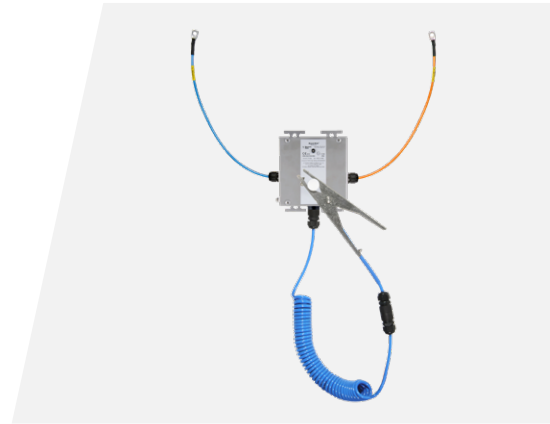
## Bond-Rite® REMOTE (EP)

For process applications that require grounding for more than 6 hours per day, the **Bond-Rite REMOTE EP** (EP = Externally Powered) utilises 115 V AC or 230 V AC mains supply / line power to feed the monitoring circuit of each indicator station.

The external power supply can be located in both the 'hazardous' (Div. 2 / Zone 2/22) and 'non-hazardous' areas, with the indicator stations mounted in the HAZLOC / zoned area (Div.1 / Zone 0) or lower.

When used in conjunction with the Newson Gale Universal Power Supply, up to 10 **Bond-Rite REMOTE** indicator stations can be powered simultaneously. This enables users to actively monitor up to 10 items of plant equipment susceptible to charge accumulation (e.g. drums) independently of each other.

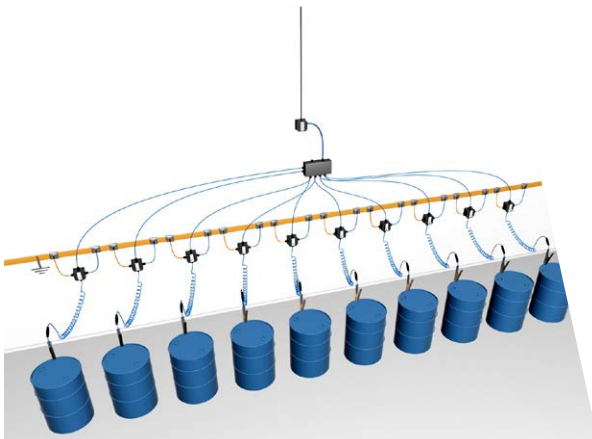
An additional advantage of this configuration is that the external power supply itself can be installed within the hazardous area. For more detailed information please refer to the cCSAus and ATEX / IECEx technical specification pages.



**Bond-Rite REMOTE**  
Stainless steel enclosure

### Features and Benefits

- **Highly visible LED** housed in wall mounted enclosure indicates to operators when a resistance threshold of 10 Ohms or less has been achieved.
- **Tungsten carbide teeth** bite through product deposit build up, rust & drum coatings.
- **Stainless steel clamps** designed to withstand use in tough chemical processing and industrial environments.
- **10 Ohms loop resistance** monitoring based on National and International Standards and Recommended Practices\*.
- Indicator station mounted **stowage pin** provides operators with location to return the grounding clamp when the operation is finished.



*Ideal for multiple drum filling applications*

#### \*IEC/TS 60079-32-1:2017

"Explosive atmospheres: Electrostatic hazards, guidance"

#### \*PD CLC/TR 60079-32-1:2018

"Explosive atmospheres: Electrostatic hazards, guidance"

#### \*NFPA 77:2024

"Recommended Practice on Static Electricity"

\* Always check for and read the latest version of the International Standards, Guidance and/or Recommended Practices.

# Bond-Rite® REMOTE

Continuous Ground Loop Monitoring with Visual Indication

## Bond-Rite® REMOTE (GRP)

### Technical Specification

#### Bond-Rite REMOTE (GRP) - Battery Powered and Mains Powered

<b>Ingress Protection</b>	Type 4X (IP 66)
<b>Ambient Temperature Range</b>	-40°F to +140°F
<b>Monitored Loop Resistance</b>	Nominally $\leq 10 \Omega$ ( $\pm 10\%$ )
<b>Indicator Lamp</b>	LED: 1 green
<b>Battery Supply Option</b>	Varta 6122 E-Block (9 V Lithium-Manganese Battery) supplied with unit
<b>Power Supply Option</b>	Newson Gale Universal Power Supply
<b>Enclosure Material</b>	Glass Reinforced Plastic (carbon loaded)

### Hazardous Location Approvals

#### North America:

##### NEC 500 / CEC (Class & Division)

Intrinsically safe equipment Exia for use in:  
 Class I, Div. 1, Groups A, B, C, D.  
 Class II, Div. 1, Groups E, F, G.  
 Class III, Div. 1.  
 Temperature Code: T4  
 Ta = -40°F to +140°F / -40°C to +60°C  
 OSHA recognised NRTL: CSA

##### NEC 505 & 506 (Class & Zoning)

Class I, Zone 0, AEx ia IIC T4 Ga  
 Class II, Zone 20, AEx iaD 20 T135°C

##### CEC Section 18 (Class & Zoning)

Class I, Zone 0 Ex ia IIC T4 Ga  
 DIP A20, IP66, T135°C

#### Europe / International Version Available:

##### IECEX

Ex ia IIC T4 Ga  
 Ex ta IIIC T135°C Da  
 Ta = -40°C to +60°C  
 IECEX EXV 19.0061X  
 IECEX Certifying Body: ExVeritas

##### ATEX

II 1 G  
 II 1 D  
 Ex ia IIC T4 Ga  
 Ex ta IIIC T135°C Da  
 Ta = -40°C to +60°C  
 ExVeritas 19ATEX0547X  
 ATEX Notified Body: ExVeritas

##### UKCA Ex

II 1 G  
 II 1 D  
 Ex ia IIC T4 Ga  
 Ex ta IIIC T135°C Da  
 Ta = -40°C to +60°C  
 ExVeritas 21UKEX0835X  
 UKCA Ex Approved Body: ExVeritas

##### CCC

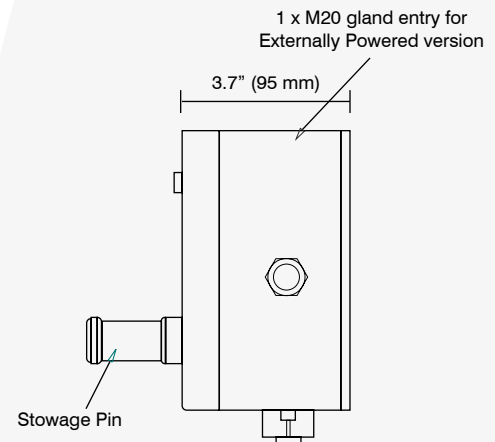
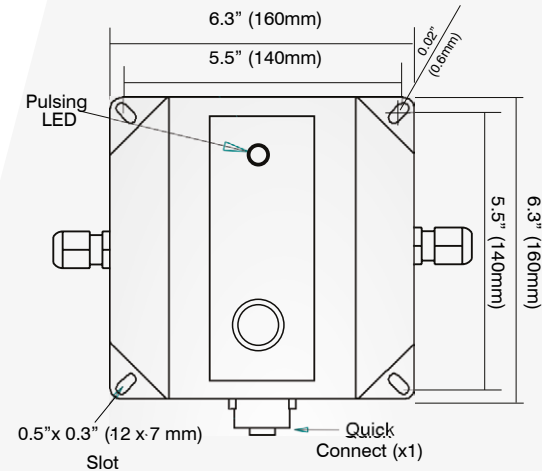
Ex ia IIC T4 Ga  
 Ex ta IIIC T135°C Da  
 2021312304001043  
 Approved Body: CNEC

##### KCs (Gas)

Ex ia IIC T4 Ga  
 Ta = -40°C to +60°C  
 22-AV4BO-0300X  
 Approved Body: KOSHA

##### KCs (Dust)

Ex ta IIIC T135°C Da  
 Ta = -40°C to +60°C  
 22-AV4BO-0301X  
 Approved Body: KOSHA



# Bond-Rite® REMOTE

Continuous Ground Loop Monitoring with Visual Indication

## Bond-Rite® REMOTE (Stainless Steel)

### Technical Specification

#### Bond-Rite REMOTE [Stainless Steel] - Battery Powered and Mains Powered

<b>Ingress Protection</b>	Type 4X (IP 66)
<b>Ambient Temperature Range</b>	-40°F to +140°F
<b>Monitored Loop Resistance</b>	Nominally $\leq 10 \Omega$ ( $\pm 10\%$ )
<b>Resistance Indicator Lamp</b>	LED: 1 green
<b>Battery Supply Option</b>	Varta 6122 E-Block (9 V Lithium-Manganese Battery) supplied with unit
<b>Power Supply Option</b>	Newson Gale Universal Power Supply
<b>Enclosure Material</b>	Stainless Steel (SS grade: 316L)

### Hazardous Location Approvals

#### North America:

##### NEC 500 / CEC (Class & Division)

Intrinsically safe equipment Exia for use in:  
 Class I, Div. 1, Groups A, B, C, D.  
 Class II, Div. 1, Groups E, F, G.  
 Class III, Div. 1.  
 Temperature Code: T4  
 Ta = -40°F to +140°F / -40°C to +60°C  
 OSHA recognised NRTL: CSA

##### NEC 505 & 506 (Class & Zoning)

Class I, Zone 0, AEx ia IIC T4 Ga  
 Class II, Zone 20, AEx iaD 20 T135°C

##### CEC Section 18 (Class & Zoning)

Class I, Zone 0 Ex ia IIC T4 Ga  
 DIP A20, IP66, T135°C

#### Europe / International Version Available:

##### IECEX

Ex ia IIC T4 Ga  
 Ex ta IIIC T135°C Da  
 Ta = -40°C to +60°C  
 IECEX EXV 19.0061X  
 IECEX Certifying Body: ExVeritas

##### ATEX

II 1 G  
 II 1 D  
 Ex ia IIC T4 Ga  
 Ex ta IIIC T135°C Da  
 Ta = -40°C to +60°C  
 ExVeritas 19ATEX0547X  
 ATEX Notified Body: ExVeritas

##### UKCA Ex

II 1 G  
 II 1 D  
 Ex ia IIC T4 Ga  
 Ex ta IIIC T135°C Da  
 Ta = -40°C to +60°C  
 ExVeritas 21UKEX0835X  
 UKCA Ex Approved Body: ExVeritas

##### CCC

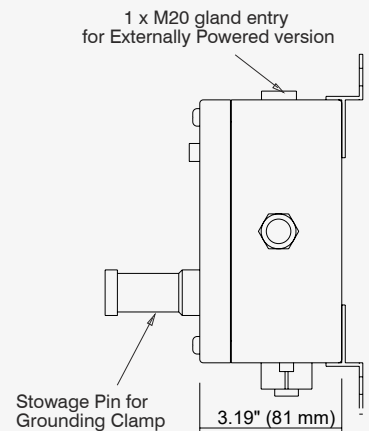
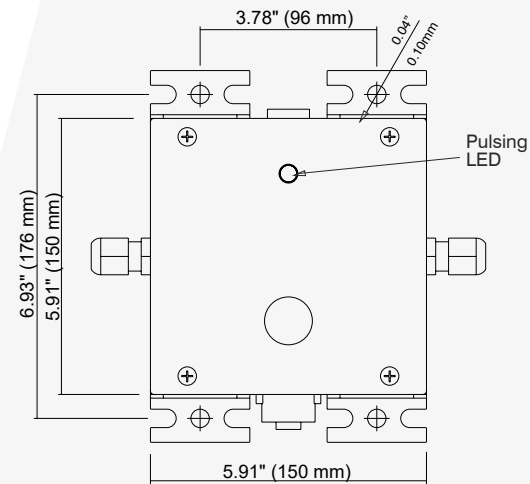
Ex ia IIC T4 Ga  
 Ex ta IIIC T135°C Da  
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 Approved Body: CNEC

##### KCs (Gas)

Ex ia IIC T4 Ga  
 Ta = -40°C to +60°C  
 22-AV4BO-0300X  
 Approved Body: KOSHA

##### KCs (Dust)

Ex ta IIIC T135°C Da  
 Ta = -40°C to +60°C  
 22-AV4BO-0301X  
 Approved Body: KOSHA



### Bond-Rite® REMOTE Universal Power Supply

#### Technical Specification

##### Universal Power Supply Unit

<b>Ingress Protection</b>	Type 4X (IP 66)
<b>Ambient Temperature Range</b>	-13°F to +131°F
<b>Power Supply</b>	115 V or 230 V AC, 50-60 Hz
<b>Enclosure Construction</b>	Glass Reinforced Plastic (carbon loaded)

#### Hazardous Location Approvals

##### North America:

##### NEC 500 / CEC (Class & Division)

Associated Equipment [Exia] for use in:  
 Class I, Div. 2, Groups A, B, C, D;  
 Class II, Div. 2, Groups E, F, G;  
 Class III, Div. 2.  
 Providing Intrinsically safe circuits for:  
 Class I, Div. 1, Groups A, B, C, D;  
 Class II, Div 1, Groups E, F, G;  
 Class III, Div 1.

Temperature code: T4  
 Ta = -13°F to +131°F / -25°C to +55°C  
 OSHA recognised NRTL: CSA

##### NEC 505 & 506 (Class & Zoning)

Class I, Zone 2 (Zone 0) AEx nA [ia] IIC T4  
 Class II, Zone 22, AEx tD [iaD] 22 T70°C

##### CEC Section 18 (Class & Zoning)

Class I, Zone 2 (Zone 0) Ex nA [ia] IIC T4  
 DIP A22 T70°C

##### Europe / International Version Available:

##### IECEX

Ex ec [ia Ga] IIC T4 Gc  
 Ex tb [ia Da] IIIC T70°C Db  
 Ta = -40°C to +55°C  
 IECEX EXV 19.0063  
 IECEX Certifying Body: ExVeritas

##### ATEX

Ex ec [ia Ga] IIC T4 Gc  
 Ex tb [ia Da] IIIC T70°C Db  
 Ta = -40°C to +55°C  
 ExVeritas 19ATEX0551  
 ATEX Notified Body: ExVeritas

##### UKCA Ex

Ex ec [ia Ga] IIC T4 Gc  
 Ex tb [ia Da] IIIC T70°C Db  
 Ta = -40°C to +55°C  
 ExVeritas 21UKEX0836  
 UKCA Ex Approved Body: ExVeritas

##### CCC

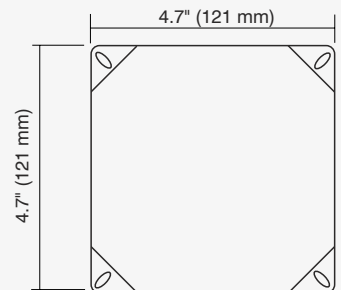
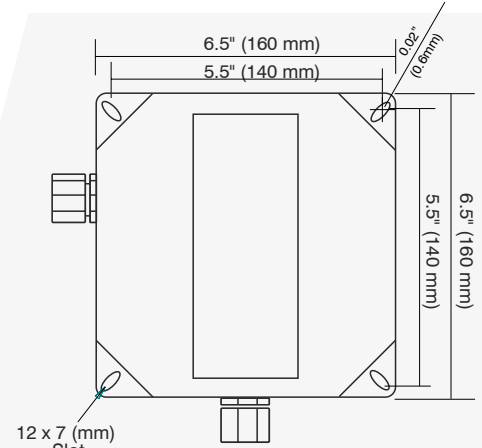
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 Ex tb [ia Da] IIIC T70°C Db  
 2021312303000497  
 Approved Body: CNEX

##### KCs (Gas)

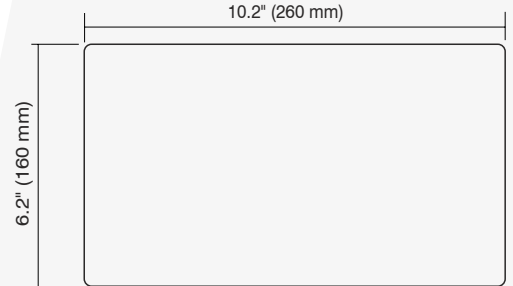
Ex ec [ia] IIC T4 Gc(Ga)  
 Ta = -40°C to +55°C  
 22-AV4BO-0302X  
 Approved Body: KOSHA

##### KCs (Dust)

Ex tb IIIC T70°C Db IP66  
 Ta = -40°C to +55°C  
 22-AV4BO-0303X  
 Approved Body: KOSHA



4 Entry Junction Box



10 Entry Junction Box

#### Additional Certification

##### EMC Tested

to EN 61000-6-2, EN 61000-6-3  
 to FCC - Part 15

## Bond-Rite® REMOTE

### Equipment Options

#### Cable Length Options

Equipment specifiers can order the Bond-Rite REMOTE with 2-pole Cen-Stat cable on standard spiral lengths of 10 ft (3 m), 16 ft (5 m) and 32 ft (10 m) of cable.

The spiral cable retracts when the clamp is not in use, ensuring the cable is neatly stowed and safely out of the way.



#### 2-Pole Surface Mountable Connector

With this assembly operators tasked with earthing mobile process equipment will have a dedicated earthing point to attach the easy to use screw thread connector. The 'plug and play' connector can interface with all Newson Gale 2 core systems to provide earth monitoring capability on a wide range of mobile processes and equipment where generic earthing clamps cannot be used.

The conical shape design aids in the reduction of powder deposit build up over time and aids in clean down operations.

- Made using Stainless Steel (SS grade: 304) with Viton O-Rings
- IP 66
- -40°F to 140°F
- Various lengths of straight or spiral Hytrel cable available.



# Bond-Rite® REMOTE

Continuous Ground Loop Monitoring with Visual Indication

## Bond-Rite® REMOTE

### Equipment Options

#### Universal Resistance Tester (URT)

The URT is designed to provide users of Newson Gale Bond-Rite static grounding systems with a means of testing the permissive resistance range on a regular basis.

The easy to use tester consists of a pair of rotary switches that enable a competent electrical person to check the resistance level at which the grounding system should be working and conduct a PASS / FAIL test at the required setting.



**NOTE:** For a complete Bond-Rite REMOTE EP installation, the power supply module (ER/UPS/AC) must be ordered with the required number of remote indicator stations. Up to 10 Bond-Rite REMOTE indicator stations can be powered by a single ER/UPS/AC universal power supply.

Different lengths of spiral cable available on request. Contact your local Newson Gale office, or preferred supplier, for more options.



Designed for grounding 55 gallon closed drums and smaller containers.



Designed for grounding 55 gallon drums and larger containers.

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