RD7100®
Electromagnetic and RF Marker locator
Technical specification
# RD7100 Electromagnetic and RF Marker locator technical specification

## 1. Product Summary

### 1.1 Product Descriptions
- Precision Buried Utility Locator
- Precision Cable, Pipe and RF Marker Locator
- Locate System Receiver
- Utility Specific Precision Locator

### 1.2 Intended Use
- Locating the position/path of buried cables, pipes and RF Markers
- Detecting and pinpointing insulation faults on buried pipes and cables
- Creating survey records of buried cables and pipes locations

### 1.3 Standard Equipment
- Locator
- Lithium Battery pack
- Mains and Automotive chargers
- Quickstart guide
- Mini USB 2.0 compliant data cable

## 2. Performance

### 2.1 Sensitivity
- 6E-15 Tesla
- 5µA at 1 meter (33kHz)

### 2.2 Dynamic range
- 140dB rms/√Hz

### 2.3 Selectivity
- 120dB/Hz

### 2.4 Depth measurement precision
- Cable / Pipe / Sonde: ± 3%
- RF Markers: ± 15% ± 5cm – RF Marker Type dependent. Depth precision valid to:
  - Near Surface: 2’ / 60cm
  - Ball Marker: 4.9’ / 1.5m
  - Mid-Range: 5.9’ / 1.8m
  - Full Range: 7.9’ / 2.4m

### 2.5 Locate accuracy
- ± 5% of depth

### 2.6 Active Locate filter bandwidth
- ± 3Hz, 0 < 1kHz
- ± 10Hz, ≥ 1kHz

### 2.7 Start-up time
- Less than 1 second

### 2.8 Maximum depth readout
- Cable / Pipe: 98’ / 30m
- Sonde: 64’ / 19.5m
- RF Markers: 16’ / 5m

## 3. Locate Functions

### 3.1 Active Locate Modes
- Up to 6, model dependent:
  - Peak
  - Peak+™ (choice of combined Peak & Guidance or Peak & Null)
  - Guidance
  - Null
  - RF Marker
  - Combined (Cable, Pipe and RF Marker)

### 3.2 Gain control
- Guidance Mode: Automatic
- Other modes: Manual gain using “+” or “-“ with one touch to return to center (50% of Full Scale)
### 3.3 Active locate frequencies

<table>
<thead>
<tr>
<th>RD7100 MODEL</th>
<th>DLM</th>
<th>PLM</th>
<th>TL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active frequencies</td>
<td>6</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>512Hz</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>640Hz</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>8kHz (8192Hz)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>33kHz (32768Hz)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>65kHz (65536Hz)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>83kHz (83077Hz)</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>131kHz (131072Hz)</td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>200kHz (200000Hz)</td>
<td></td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>

### 3.4 RF Markers

<table>
<thead>
<tr>
<th>UTILITY</th>
<th>COLOR</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>French Power</td>
<td>Natural</td>
<td>40.0kHz</td>
</tr>
<tr>
<td>General / Non-drinkable water</td>
<td>Purple</td>
<td>66.35kHz</td>
</tr>
<tr>
<td>Cable TV</td>
<td>Black / Orange</td>
<td>77.0kHz</td>
</tr>
<tr>
<td>Gas</td>
<td>Yellow</td>
<td>83.0kHz</td>
</tr>
<tr>
<td>Telephone / Telecoms</td>
<td>Orange</td>
<td>101.4kHz</td>
</tr>
<tr>
<td>Sanitary</td>
<td>Green</td>
<td>121.6kHz</td>
</tr>
<tr>
<td>German Power</td>
<td>Blue / Red</td>
<td>134.0kHz</td>
</tr>
<tr>
<td>Water</td>
<td>Blue</td>
<td>145.7kHz</td>
</tr>
<tr>
<td>Electrical Power*</td>
<td>Red</td>
<td>169.8kHz</td>
</tr>
</tbody>
</table>

*Use of the red Electrical Power (PWR) marker locate mode is subject to radio licensing restrictions for Short Range Devices in the EU and possibly other countries. It is the responsibility of the user to ensure that the red Power (PWR) marker locate mode is only enabled in countries where radio licensing restrictions do not apply at the operating frequency of 169kHz.

### 3.5 Sonde frequencies

<table>
<thead>
<tr>
<th>RD7100 MODEL</th>
<th>DLM</th>
<th>PLM</th>
<th>TLM</th>
</tr>
</thead>
<tbody>
<tr>
<td>512Hz</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>640Hz</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>8kHz (8192Hz)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>33kHz (32768Hz)</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

### 3.6 Fault Find

Locate insulation sheath faults on pipes and cables to 10cm / 4” accuracy using the accessory A-Frame and a compatible transmitter

### 3.7 Passive Locate Modes

<table>
<thead>
<tr>
<th>RD7100 MODEL</th>
<th>DL</th>
<th>PL</th>
<th>TL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Radio</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CPS (Cathodic Protection System)</td>
<td>●</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 3.8 Power Filters™ function

Switch out of Radiodetection’s sensitive Power Mode to locate on any of 5 individual mains harmonic frequencies. (RD7100PLM only).

<table>
<thead>
<tr>
<th>HARMONIC</th>
<th>50 Hz regions</th>
<th>60 Hz regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>50 Hz</td>
<td>60 Hz</td>
</tr>
<tr>
<td>3rd</td>
<td>150 Hz</td>
<td>180 Hz</td>
</tr>
<tr>
<td>5th</td>
<td>250 Hz</td>
<td>300 Hz</td>
</tr>
<tr>
<td>7th</td>
<td>350 Hz</td>
<td>420 Hz</td>
</tr>
<tr>
<td>9th</td>
<td>450 Hz</td>
<td>540 Hz</td>
</tr>
</tbody>
</table>

● Available feature
### 3.9 Information displayed
- Signal strength - moving bar graph and numeric value
- Mode indication (Peak, Null, Guidance, Peak+ with option of Guidance arrows or Null arrows)
- Line or Sonde locate type
- Proportional left/right indication
- Compass: full 360° line direction indicator
- Accessories in use indication
- Accessory specific custom screen
- Simultaneous depth and current readout (Line location)
- Depth readout (Sonde location)
- Gain level (in dB)
- Frequency selected
- Marker Selected
- Battery condition
- Speaker volume
- Operating frequency
- GPS satellites in view (where fitted)
- GPS status (where fitted)
- Configuration menu and submenus
- Software version
- Last calibration date
- Fault Find mode indicator (model dependent)
- StrikeAlert® warning
- Overload warning

### 3.10 Audio output tones
**Power / Radio modes:**
Real Sound™ derived from detected electromagnetic signal

**Peak / Peak+ modes:**
Synthesized audio tone proportional to signal strength

**Guidance mode:**
Continuous tone when locator is to the left of target, intermittent tone when to the right of target

**Null mode:**
Synthesized audio tone proportional to signal strength. Low pitch to left of target, high pitch to right of target

**StrikeAlert® audio warning:**
Audio feedback for menu navigation

### 3.11 Accessory locate functions
- **Locator clamps:** Used to identify individual target cable(s) in a bundle or cabinet using signal strength read-out
- **Stethoscopes:** Used to identify individual target cable(s) in a bundle or confined space such as a cabinet using signal strength read-out

### 4. Locate Function Enhancements

#### 4.1 StrikeAlert™
Audio and visual warning when a cable or pipe less than 12” / 30cm deep is detected. Operates in Active and Passive locating modes

#### 4.2 Dynamic Overload Protection™
40dB, automatic
- Automatically manages the system gain to compensate for strong signals e.g. from mains power or substations, to enable accurate locating

#### 4.3 Simultaneous depth and current readout
Both utility depth and locate signal current are displayed simultaneously, giving the operator more information to help them to follow the target utility

#### 4.4 Fault Find
Apply a Fault Find signal with a Tx-5 and Tx-10 transmitter, then use an accessory A-Frame to detect and pinpoint insulation faults (RD7100PLM and TLM models only)

- Fault find accuracy:
  - Metric: 100mm
  - Imperial: 4"

#### 4.5 Peak+ mode
Use the accurate Peak bargraph, and add either proportional Guidance arrows for faster locating, or Null arrows to check for the presence of distortion
5. Configurability

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Option selection</td>
<td>All options can be enabled or disabled on the locator or using the RD Manager PC software</td>
</tr>
<tr>
<td>5.2 Languages supported</td>
<td>Fourteen: English, French, German, Dutch, Polish, Czech, Slovakian, Spanish, Portuguese, Swedish, Italian, Turkish, Russian, Hungarian</td>
</tr>
<tr>
<td>5.3 Mains power network options</td>
<td>50 Hz or 60 Hz</td>
</tr>
<tr>
<td>5.4 Mode selection</td>
<td>All locate modes can be individually enabled or disabled</td>
</tr>
<tr>
<td>5.5 Active frequency selection</td>
<td>All active frequencies available can be individually enabled or disabled</td>
</tr>
<tr>
<td>5.6 Active RF Marker selection</td>
<td>All RF Markers can be individually enabled or disabled</td>
</tr>
<tr>
<td>5.7 Passive mode selection</td>
<td>All passive modes can be individually enabled or disabled</td>
</tr>
<tr>
<td>5.8 Strike Alert</td>
<td>Enable / disable</td>
</tr>
<tr>
<td>5.9 Peak+ arrow selection</td>
<td>Guidance arrows or Null arrows Selected using the locator menu or with a long press of the antenna key</td>
</tr>
<tr>
<td>5.10 Time / date setting</td>
<td>Correct or update locator real-time clock using the RD Manager PC software or GNSS signals (GPS/Logging enabled units)</td>
</tr>
</tbody>
</table>

6. Connectivity

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 Wireless connections</td>
<td>Bluetooth 2.0 – SPP profile, class 1</td>
</tr>
<tr>
<td>6.2 Wired connections</td>
<td>Mini USB: Connect to a PC to configure and update locator, and to retrieve usage log 3.5mm Stereo jack: Connect wired headphones Accessory port: Connect Radiodetection accessories</td>
</tr>
</tbody>
</table>

7. Data capabilities and GNSS (‘GPS’)

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 Usage-logging and survey measurements</td>
<td>RD7100 MODEL DLM PLM TLM</td>
</tr>
<tr>
<td>Usage-logging</td>
<td>● ● ●</td>
</tr>
<tr>
<td>Survey Measurement (to external device)</td>
<td>● ● ●</td>
</tr>
<tr>
<td>7.2 Usage-logging memory</td>
<td>4 GB</td>
</tr>
<tr>
<td>7.3 Usage-logging capacity</td>
<td>Over 500 days, measured at 8 hours use per day</td>
</tr>
<tr>
<td>7.4 Usage-logging capture rate</td>
<td>1/ second</td>
</tr>
<tr>
<td>7.5 Usage parameters logged</td>
<td>Serial number Log reference and id Operating mode Locate frequency Sonde/line Signal strength Gain setting Depth Current Accessory in use Antenna mode Arrows readout Compass angle Overload status Dynamic Overload Protection Status RF Marker Type Marker Depth Marker Signal Strength (%) Marker Gain (dB) Keys pressed Audio status Volume Menu in use Battery status User warnings status StrikeAlert status Fault find arrow SideStep status Language Depth units Power setting Compass setting Logging Units: Date and time With a GNSS fix: Latitude Longitude Altitude GNSS date and time Horiztonal Dilution Geoid DGPS Time and ID Geoid Units GNSS fix Number of satellites Altitude units Altitude units Time reference</td>
</tr>
<tr>
<td>7.6 GNSS (‘GPS’) support</td>
<td>Over Bluetooth via RD Map™ for Android Connect an external GNSS enabled device to RD Map for Android to combine external GPS data with survey measurements</td>
</tr>
<tr>
<td>7.7 Survey measurement options</td>
<td>Bluetooth – ‘live,’ per measurement Bluetooth – batch export</td>
</tr>
</tbody>
</table>

● Available feature
7.8 Bluetooth survey measurement data protocol options
PPP
ASCII (choice of 3 formats)

7.9 Survey measurement data transmitted
Standard data:
Log #
Survey Reference
Antenna Mode
Depth
Current (mA)
Frequency in use (Hz)
Sonde/Line
Signal Strength (dBµV and %)
Signal Strength (%)
Gain Setting (dB)
Compass (deg)
Arrow readout
CD Phase (deg)
Accessory Type
Battery level
Volume
Overload Flag
RF Marker Type
Marker Depth
Marker Signal Strength (%)
Marker Gain (dB)

Usage-Logging Units:
Date and Time
With Internal or External GNSS Fix:
GPS Mode
GPS Date and Time
GPS Distance (m)
Latitude Angle (deg)
Latitude Direction
Longitude Angle (deg)
Longitude Direction
GPS Fix
Satellites in use
Horizontal Dilution
Altitude Value (m)
Altitude Units
Geoid Value (m) and Units
DGPS Time
DGPS ID
Time Reference
GPS Mode
GPS Date and Time
GPS Distance (m)
Latitude Angle (deg)

8. Power options
8.1 Lithium-Ion (Li-Ion)
Custom Lithium-Ion (Li-Ion) battery pack

8.2 Alkaline
3 × D-Cell (MN1300 / LR20) alkaline batteries (standard)

8.3 Rechargeable
3 × D-Cell (MN1300 / LR20) Nickel Metal Hydride (NiMH) batteries

8.4 Battery run-time (continuous)³
Li-Ion pack: 22 hours
3 × Alkaline D-Cells: 15 hours

8.5 Battery chemistry identification
Lithium-Ion pack: Automatic sensing
NiMH / Alkaline: Software switchable

8.6 Charging options (Li-Ion pack)
Mains charger: 100-250 Volts AC, 50/60 Hz
Automotive charger: 12-24V DC

8.7 Charging time (Li-Ion pack)
3 hours to 80% from empty with maintenance trickle charging thereafter

8.8 Charging Temperature
Metric: 0°C to 45°C
Imperial: 32°F to 113°F

9. Physical Characteristics
9.1 Design
Ergonomic, balanced and lightweight design for comfortable use during extended surveys

9.2 Construction
Injection Molded ABS Plastic

9.3 Weight
With Lithium-Ion battery pack fitted:
Metric: 2.1kg
Imperial: 4.2lb

With D-cell alkaline batteries fitted:
Metric: 2.3kg
Imperial: 5lb

9.4 Ingress Protection rating
IP65* (see note)
Protected against dust ingress and jets of water applied from any direction
*Note: The antenna loop is protected to IP55, as small amounts of dust can penetrate but its operation is not impacted

9.5 Display type
High contrast custom made monochrome LCD

9.6 Audio options
Built-in waterproofed speaker
3.5mm headphone socket

9.7 Operating temperature⁵
As a cable and pipe locator:
Metric: -20°C to 50°C
Imperial: -4°F to 122°F

As a RF locator:
Metric: -10°C to 50°C
Imperial: 14°F to 122°F
### 9.8 Storage temperature  
<table>
<thead>
<tr>
<th>Metric</th>
<th>Imperial</th>
</tr>
</thead>
<tbody>
<tr>
<td>-20°C to 70°C</td>
<td>-4°F to 158°F</td>
</tr>
</tbody>
</table>

### 9.9 Unit dimensions  
<table>
<thead>
<tr>
<th>Metric</th>
<th>Imperial</th>
</tr>
</thead>
<tbody>
<tr>
<td>648mm × 286mm × 125mm</td>
<td>25.5&quot; × 11.3&quot; × 4.9&quot;</td>
</tr>
</tbody>
</table>

### 9.10 Shipping dimensions  
<table>
<thead>
<tr>
<th>Metric</th>
<th>Imperial</th>
</tr>
</thead>
<tbody>
<tr>
<td>700mm x 260mm x 330mm</td>
<td>27.6&quot; x 10.2&quot; x 13&quot;</td>
</tr>
</tbody>
</table>

### 9.11 Shipping weight (with batteries fitted)  
<table>
<thead>
<tr>
<th>Metric</th>
<th>Imperial</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.6kg</td>
<td>7.9lb</td>
</tr>
</tbody>
</table>

### 10. RD Manager™ Supporting PC Software

#### 10.1 Operating System Compatibility  
Microsoft® Windows® 10 64-bit versions

#### 10.2 Locator system compatibility  
Radiodetection RD8100 and RD7100 Precision Locators  
RD7000+ and RD8000 Cable, Pipe and Marker Locators

#### 10.3 Functions  
- Locator configuration
- eCert™ remote calibration certification
- Factory calibration certificate retrieval
- Usage-logging data collation and export
- User account management
- CALSafe™ maintenance schedule enforcement
- Product registration for extended warranty
- Locator software update

#### 10.4 Data export formats  
- .kml for Google® Maps
- .csv for database and spreadsheet applications
- .xls / .xlsx for Microsoft® Excel®

#### 10.5 KML data export options  
Filter usage-logging and survey measurement points on Google® maps.  
Select data to be tagged. Customize icon type / color, label type / color, line type / color

### 11. Warranty and Maintenance

#### 11.1 Manufacturer's warranty duration  
3 years standard, on registration

#### 11.2 Recommended calibration and maintenance schedule  
Annual, or at the beginning / end of a lease period if earlier

#### 11.3 eCert remote calibration  
- Remote calibration certification using an internet connection to Radiodetection
- Recommended schedule: annual, or at the beginning / end of a lease period

#### 11.4 CALSafe™  
- Can be enabled to prevent the locator operating when beyond a defined calibration / maintenance schedule
- Disabled by default
- 30-day countdown to calibration due date

#### 11.5 Enhanced Self-Test  
On-unit  
Applies test signals to locate circuitry to confirm correct operation, as well as the typical tests for screen and DSP functions.  
Recommended schedule: weekly, or before each use.

#### 11.6 Storage recommendation  
Store in a clean and dry environment.  
Ensure all terminals and connection sockets are clean, free of debris and corrosion and are undamaged

#### 11.7 Cleaning  
Clean with a soft, moistened cloth.  
Do not use  
- Abrasive materials or chemicals
- High pressure jets of water

If using this equipment in foul water systems or other areas where biological hazards may be present, use an appropriate disinfectant.
### 12. Certification and Compliance

#### 12.1 Standards

**Safety:**
- EN 61010-1:2010
- EN 61326-1:2013
- EN 300 330-2 (V1.5.1)
- EN 300 440-2 (V1.4.1)
- EN 301 489-3 (V1.6.1)
- EN 301 489-17 (V2.2.1)

**EMC:**
- EN 60529 1992 A2 2013
- EN 60068-2-64:2008 Test Fh
- ESTI EN 300 019-2-2:1999 (per table 6)
- EN 60068-2-27:2009 (Test Ea)
- ESTI EN 300 019-2-2:1999 (per table 6)

**Environmental:**
- EN 60068-2-64:2008 Test Fh
- ESTI EN 300 019-2-2:1999 (per table 6)
- EN 60068-2-27:2009 (Test Ea)
- ESTI EN 300 019-2-2:1999 (per table 6)

#### 12.2 European directives

- Low Voltage Directive – 2014/35/EU
- EMC Directive – 2014/30/EU

Declaration of conformity is available from www.radiodetection.com

#### 12.3 Environmental

- WEEE compliant
- ROHS compliant

#### 12.4 Manufacturing

- ISO 9001:2015

### 13. Compatible Accessories

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Part description</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.1 Phone support kit</td>
<td>Locator bracket adapter, arms and mobile phone holder – complete kit (see mobile phone holder dimensions 13.4)</td>
<td>10/RX-PHONE-HOLD-KIT</td>
</tr>
<tr>
<td>13.2 Tablet support kit</td>
<td>Locator bracket adapter, arms and tablet holder – complete kit</td>
<td>10/RX-TABLET-7-8-HOLD-KIT</td>
</tr>
<tr>
<td>13.3 Mobile device support bracket and arm</td>
<td>Locator bracket adapter and arms (needs either a Phone or Tablet holder)</td>
<td>10/RX-HOLDER-MOUNT</td>
</tr>
<tr>
<td>13.4 Mobile phone holder</td>
<td>Mobile phone holder (requires a mobile device support bracket and arm)</td>
<td>10/RX-PHONE-HOLDER</td>
</tr>
</tbody>
</table>

- **Minimum Height**
  - 57mm / 2.25"
  - 108mm / 4.25"
- **Minimum Width**
  - 48mm / 1.875"
- **Maximum Width**
  - 83mm / 3.25"
- **Depth:**
  - 22mm / 0.875"

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Part description</th>
<th>Part number</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.5 Tablet holder</td>
<td>7”-8” Tablet holder (requires a mobile device support bracket and arm)</td>
<td>10/RX-TABLET-7-8-HOLDER</td>
</tr>
<tr>
<td>13.6 RAM Bracket adapter</td>
<td>Bracket adapter for RAM® mounts</td>
<td>10/RX-RAM-ADPT</td>
</tr>
<tr>
<td>13.7 RAM Bracket O-Ring set</td>
<td>Spare set of 2 O-rings</td>
<td>10/RX-RAM-ADPT-ORING</td>
</tr>
<tr>
<td>13.8 Lithium-Ion battery packs</td>
<td>Li-Ion rechargeable battery mains kit (includes mains charger)</td>
<td>10/RX-MBATPACK-LION-K</td>
</tr>
<tr>
<td></td>
<td>Li-Ion rechargeable battery pack (no charger)</td>
<td>10/RX-BATPACK-LION</td>
</tr>
<tr>
<td>13.9 Lithium-Ion battery chargers</td>
<td>Li-Ion automotive charger</td>
<td>10/RX-ACHARGER-LION</td>
</tr>
<tr>
<td></td>
<td>Li-Ion mains charger</td>
<td>10/RX-MCHARGER-LION</td>
</tr>
<tr>
<td>Accessory</td>
<td>Description</td>
<td>Part number</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>13.10 Alkaline battery trays</td>
<td>3 × D Cell battery tray (MN1300/LR20)</td>
<td>10/RX-3DCELL-TRAY</td>
</tr>
<tr>
<td>13.11 Transportation and storage accessories — For combined locator and transmitter</td>
<td>Soft Carry Bag, Wheeled Flight Case, Hard Case</td>
<td>10/LOCATORBAG, 10/RD7K8KCASE, 10/RD7K8KCASE-USA</td>
</tr>
<tr>
<td>13.12 Locator signal clamps — For identification and location of utilities</td>
<td>Metric: 50mm Locator Clamp, Imperial: 2&quot; Locator Clamp, Metric: 100mm Locator Clamp, Imperial: 4&quot; Locator Clamp, Metric: 130mm Locator Clamp, Imperial: 5&quot; Locator Clamp, CD and Current Measurement Clamp</td>
<td>10/RX-CLAMP-50, 10/RX-CLAMP-2, 10/RX-CLAMP-100, 10/RX-CLAMP-4, 10/RX-CLAMP-130, 10/RX-CLAMP-5, 10/RX-CD-CLAMP</td>
</tr>
<tr>
<td>13.13 Signal stethoscopes — To locate and identify individual utilities e.g. within walls, congested areas or when cables/utilities are in close proximity to each other</td>
<td>High Gain Stethoscope, Large Stethoscope, Small Stethoscope, CD Stethoscope</td>
<td>10/RX-STETHOSCOPE-HG, 10/RX-STETHOSCOPE-L, 10/RX-STETHOSCOPE-S, 10/RX-CD-STETHOSCOPE</td>
</tr>
<tr>
<td>13.14 Sondes</td>
<td>Battery powered signal transmitters for tracing or locating non-conductive utilities</td>
<td>Diameter</td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>in</td>
</tr>
<tr>
<td>S6 Microsonde</td>
<td>6</td>
<td>¼</td>
</tr>
<tr>
<td>S9 Minisonde</td>
<td>9</td>
<td>3/8</td>
</tr>
<tr>
<td>S13 Super Small Sonde</td>
<td>13</td>
<td>½</td>
</tr>
<tr>
<td>S18 Small Sonde</td>
<td>18</td>
<td>¾</td>
</tr>
<tr>
<td>Standard C-Sonde</td>
<td>39</td>
<td>1½</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sewer Sonde</td>
<td>64</td>
<td>2½</td>
</tr>
<tr>
<td>Super Sonde</td>
<td>64</td>
<td>2½</td>
</tr>
<tr>
<td>Flexi Sonde</td>
<td>23</td>
<td>7/8</td>
</tr>
<tr>
<td>13.15 Submersible antennas</td>
<td>512Hz Submersible DD Antenna, 640Hz Submersible DD Antenna, 8kHz Submersible DD Antenna</td>
<td>10/RX-SUBANTENNA-512, 10/RX-SUBANTENNA-640, 10/RX-SUBANTENNA-8K</td>
</tr>
<tr>
<td>13.16 FlexiTrace™ — Use with a transmitter to trace small diameter pipes</td>
<td>FlexiTrace 50m / 165', FlexiTrace 80m / 260'</td>
<td>10/TRACE50-GB, 10/TRACE80-GB</td>
</tr>
<tr>
<td>13.17 Flexrods — Fibreglass rod used for propelling Radiodetection sondes through pipes to trace the path and locate blockages</td>
<td>Length</td>
<td>Diameter</td>
</tr>
<tr>
<td></td>
<td>m</td>
<td>Ft</td>
</tr>
<tr>
<td>50</td>
<td>160</td>
<td>4.5</td>
</tr>
<tr>
<td>80</td>
<td>260</td>
<td>4.5</td>
</tr>
<tr>
<td>50</td>
<td>160</td>
<td>7</td>
</tr>
<tr>
<td>100</td>
<td>320</td>
<td>7</td>
</tr>
<tr>
<td>150</td>
<td>485</td>
<td>7</td>
</tr>
<tr>
<td>60</td>
<td>195</td>
<td>9</td>
</tr>
<tr>
<td>120</td>
<td>390</td>
<td>9</td>
</tr>
<tr>
<td>13.18 A-Frame — Used for locating sheath faults on cables and coating defects on pipelines</td>
<td>A-Frame (includes A-Frame Lead), A-Frame Bag</td>
<td>10/RX-AFRAME, 10/RX-AFRAME-BAG</td>
</tr>
<tr>
<td>13.19 Headphones</td>
<td>Recommended for use in noisy environments</td>
<td>10/RX-HEADPHONES</td>
</tr>
<tr>
<td>13.20 Calibration Certificates</td>
<td>Locator Calibration Certificate, per unit (request with initial locator order), eCert™ Calibration Credit</td>
<td>97/RX-CALCERT, 10/RX-ECERT</td>
</tr>
</tbody>
</table>
All specification are measured in test conditions, at 21°C/70°F, and fitted with fully charged Li-Ion battery pack unless otherwise noted.

1 Based on volumetric testing at a known fixed depth. True depth accuracy depends on factors such as ground composition, utility characteristics and the locate frequency/signal strength employed. Always follow local safe digging guidelines.

2 The RD7100M will locate to greater depths in the right conditions, but depth accuracy will be compromised. Depth measurement will not be displayed beyond these depths.

3 To provide repeatable measurements, run-time is measured with GPS and Bluetooth functions switched to ‘off’.

4 Water projected by a nozzle at a pressure of 30kPa/0.3 bar/4.4 psi in accordance with BS EN 60529 1992 A2 2013.

5 At very low temperatures, battery life will be degraded, LCD performance may slow and measurement precision may reduce.
Visit www.radiodetection.com

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