



# EZiSYSTEM xf

Intelligent locators and transmitters



**With Cable Detection's state of the art xf locators and transmitters, users can detect buried utilities faster and more accurately than ever before.**

The EZiSYTEM xf range has been specifically designed with long distance tracing in mind. The ability to trace low transmitter frequencies provides a greater tracing range as well as the ability to locate camera inspection systems. The EZiSYSTEM xf range makes locating underground utilities including power cables, street lighting, telecoms, conductive pipework and camera inspection systems easier than ever before, increasing your on-site safety and ultimately saving you time and money.

#### **How does the EZiCAT locate?**

The EZiCAT xf range locates buried conductive services by receiving electromagnetic signals which radiate from them. The EZiCAT's intelligent software interprets the signal data and provides the operator with an audible and visual response to the location and direction of buried utilities. Offering the user additional tracing frequencies of 512 Hz and 640 Hz, making long distance tracing and the positioning of camera inspection systems a simple task for the xf range.

**Range**

- EZiCAT xf Locators
- LOGiCAT Software
- EZiTEX xf Transmitters
- EZIROD Service Tracer
- Signal Clamp
- Property Connection Set
- Dual Frequency Sonde
- Rechargeable Battery Options

**Users**

- Surveyor specialists
- Utility installation contractors
- Specialist repair contractors
- Gas and electricity companies
- Pipe laying contractors
- Sewer – camera inspection contractors



# EZiCAT i500xf

## Benefits

- State of the art digital signal processing technology (DSP).
- Automatic controls – making the EZiCAT easy to use, requiring minimal user experience.
- Mode Lock – locator starts in last mode of operation at maximum sensitivity. For ease of use when used with transmitter.
- Hazard Zone feature indicating shallow buried service in Power, 8 kHz, 33 kHz Auto, 512 Hz, 640 Hz modes.
- Inbuilt test function for testing hardware and software.
- LCD screen with built-in light sensor, automatically enabling the backlight in dark conditions.
- Robust, lightweight design specifically engineered for tough site conditions.
- Service due indicator supporting planned maintenance schedules or quality systems by displaying a spanner icon 12 months after first use.

## Flexibility

The EZiCAT xf locators have multiple modes of operation allowing users to have maximum control at their fingertips.

### Auto Mode



Automatically locates power, radio and 33 kHz transmitter signals, helping to confirm the presence of services upon initial site occupation making cable detection easier and safer.

### Transmitter Modes



- 512 Hz & 640 Hz
- 8 kHz
- 33 kHz

Enables long distance tracing.  
Mid range distance tracing.  
Standard tracing frequency on avoidance locators, used for everyday site use.

### Radio Mode



Traces signals originating from distant radio transmitters. These signals penetrate the ground and are reradiated by buried conductive services.

### Power Mode



Locates power signals radiated by energized cables which pose the most significant risk to excavation teams.

## Intelligence

### Mode Lock

Locator starts in last mode of operation at maximum sensitivity, to simplify tracing.

### Hazard Zone

Buried utilities close to the surface pose a safety risk to site works. The Hazard Zone function provides an additional warning of the close proximity of buried services, alerting users to the immediate danger.

### Pinpoint Assist

Maintains the highest peak reading obtained on the signal strength indicator, allowing the operator to quickly and accurately pinpoint the service.

### Signal Strength Indicator (SSI)

Enables the user to trace an individual service amongst a multiple of services. The numeric display shows the highest reading over the service which is connected to the EZITEX Signal Transmitter. This ensures the user can follow the service without straying onto another. The SSI mode can also be used to trace the Dual Frequency Sonde with ease.



Full range of **EZiCAT**  
accessories available.  
Pages 16 - 17.



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### Additional features

#### Depth Indication

The EZiCAT i550xf features utility depth indication, when used in conjunction with the EZiTEX or Sonde. Operators can determine the depth of the buried utility down to 3 metres or the depth of a Sonde down to 9.9 metres.

#### Current Level Indication

Displays the amount of current flowing through a service helping to trace and verify the utility the EZiTEX is connected to.

# EZiCAT i600xf

## Benefits

- State of the art digital signal processing technology (DSP).
- Automatic controls – making the EZiCAT easy to use, requiring minimal user experience.
- Mode Lock – locator starts in last mode of operation at maximum sensitivity. For ease of use when used with transmitter.
- Hazard Zone feature indicating shallow buried service in Power, 8 kHz, 33 kHz Auto, 512 Hz, 640 Hz modes.
- Inbuilt test function for testing hardware and software.
- LCD screen with built-in light sensor, automatically enabling the backlight in dark conditions.
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Standard tracing frequency on avoidance locators, used for everyday site use.

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### Signal Strength Indicator (SSI)

Enables the user to trace an individual service amongst a multiple of services. The numeric display shows the highest reading over the service which is connected to the EZiTEX Signal Transmitter. This ensures the user can follow the service without straying onto another. The SSI mode can also be used to trace the Dual Frequency Sonde with ease.



### Additional features

#### Data Logging

The EZiCAT i600xf records and stores information whilst in use. Information is recorded every second after completion of the initial start-up routine. These records are stored in the locator's memory and can be retrieved and transferred via Bluetooth to a PC or other electronic device for analysis. Storage time is approximately 80 hours use.

#### Bluetooth Connectivity

The EZiCAT i600xf locator has the added benefit of Bluetooth wireless connectivity. It allows the EZiCAT to integrate seamlessly with mobile mapping technology to log survey data, in addition to enabling wireless Bluetooth data transfer.

#### Selectable Bluetooth Option

Standard format supplied on all Bluetooth enabled cable locators or a shortened version furthering the integration into GIS solutions.

#### LOGiCAT Software

Allows you to upload the stored records to view the locators use, simply upload all records or search by date.

**EZiCAT i600 features**  
full LOGiCAT software compatibility. Page 13.

# EZiCAT i650xf

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### Additional features

#### Depth Indication

The EZiCAT i650xf features utility depth indication when used in conjunction with the EZiTEX or Sonde. Operators can determine the depth of the buried utility down to 3 metres or the depth of a Sonde down to 9.9 metres.

#### Current Level Indication

Displays the amount of current flowing through a service helping to trace and verify the utility the EZiTEX is connected to.

#### Data Logging

The EZiCAT records and stores information whilst in use. Information is recorded every second after completion of the initial start-up routine. These records are stored in the locator's memory and can be retrieved and transferred via Bluetooth to a PC or other electronic device for analysis. Storage time is approximately 80 hours use.

#### Bluetooth Connectivity

The EZiCAT i650xf locator has the added benefit of Bluetooth wireless connectivity. It allows the EZiCAT to integrate seamlessly with mobile mapping technology to log survey data, in addition to enabling wireless Bluetooth data transfer.

#### Selectable Bluetooth Option

Standard format supplied on all Bluetooth enabled cable locators or a shortened version furthering the integration into GIS solutions.

#### LOGiCAT Software

Allows you to upload the stored records to view the locators use, simply upload all records or search by date.

# LOGiCAT

## Upload stored data for analysis

### Flexibility

LOGiCAT software allows you to upload stored records from the EZiCAT i600xf and i650xf to view the locators use, simply upload all records or search by date. Upload information includes:

#### Time and Date

Identifies when and at what time ground surveys were conducted.

#### Usage Duration

Determines how long survey teams searched for buried services and reveals actual product utilisation.

#### User Identification

Forces users to become accountable for their actions and identifies those who need additional product training.

#### Detection Mode

Allows managers to judge the quality and thoroughness of work. As more comprehensive ground surveys are conducted the locator records the mode of operation including the use of a signal generator.

### Service Detection

Discovers quickly if any buried services were detected during surveys and even determines the signal strength shown on the locator.

### Product Fleet Management

Displays and monitors the service and calibration dates of your locator fleet, ensuring they are kept in perfect working order and not being used when calibration is due.

### Diagnostic Check

Displays locators which have failed the EST (extended self test) and removes them from the active fleet for immediate repair. This reduces the possibility of defective equipment being used on-site.

### Management Reports

Produces basic statistical reports from the logged data, allowing users to see how products are utilised and how ground survey teams are using them on-site.



LOGiCAT features full  
EZiCAT compatibility.  
Pages 8 – 11.

### The benefits of data logging in five steps

See better results, more  
comprehensive ground  
surveys and a reduction  
in buried service strikes.



1 Conduct ground survey  
gathering data

2 Send logged data to  
Bluetooth enabled PC



3 View EZiCAT usage  
statistics and charts

4 Make informed decisions to  
efficiently manage EZiCAT  
fleet and operators

5 Implement changes to  
procedures for better results

# EZiTEX xf

The EZiTEX xf Signal Transmitters are the latest in cable location design, delivering a higher power output than previous models with the addition of extra low tracing frequencies. This will allow users to:

- Trace services over a greater distance.
- Improve service detection in areas of high signal interference.
- Improve depth estimation when using a depth locator.

## Flexibility

Compact design with an IP65 rating, the transmitter is fully protected even in the harshest of conditions.

### EZiTEX t100xf

Producing up to 1 watt of power

### EZiTEX t300xf

Producing up to 3 watts of power

#### Choice of tracing frequencies:

512 Hz    640 Hz    8 kHz    33 kHz

- 512 Hz & 640 Hz  
Enables long distance tracing.
- 8 kHz  
Mid range distance tracing.
- 33 kHz  
Standard tracing frequency on avoidance locators, used for everyday site use.

## Benefits

- Four adjustable power output levels – select the output for site – tracing conditions.
- Durable weatherproof design – environmental protection rating of IP65. Robust, compact and lightweight design engineered for tough site conditions.
- Choice of 4 tracing signals – select the frequency for site – tracing range.
- Ease of use – default output frequency of 33 kHz power level 2.
- Clear, audio visual controls – externally mounted, displaying the transmitters output condition.
- In built test function – allowing operators to test the hardware and software functionality of the EZiTEX before use.





# Accessories

## EZiROD

The EZiROD enables non-metallic drains, ducts or pipes to be traced when used in conjunction with the EZiCAT and the EZiTEX signal transmitter or other signal generator.

The EZiROD's coiled fibre-glass rod, which protects the central copper tracing conductor, is available in lengths of 30 metres, 50 metres, or 80 metres.

The fibre-glass rod is inserted and pushed along in the duct under investigation. The EZiTEX signal transmitter is connected, and the tracing signal is located on the surface by the EZiCAT.

## Signal Clamp

For use with the EZiTEX signal transmitter, enabling connection to cylindrical metallic services (e.g. pipes, insulated electricity cables).

## Property Connection Set

For use with the EZiTEX signal transmitter. Enabling a connection to mains electrical supplies.

## Dual Frequency Sonde

Compact dual frequency signal transmitter used to trace drains, sewers and other non conductive services. The Sonde can be attached to a range of equipment including drain rods, boring tools and inspection cameras.

## Rechargeable Batteries

Available as an optional extra on EZiCAT and EZiTEX models.

### Transmitter Pack

Consisting of, Mains smart charger, D Type Battery Pack, Charging Cradle.

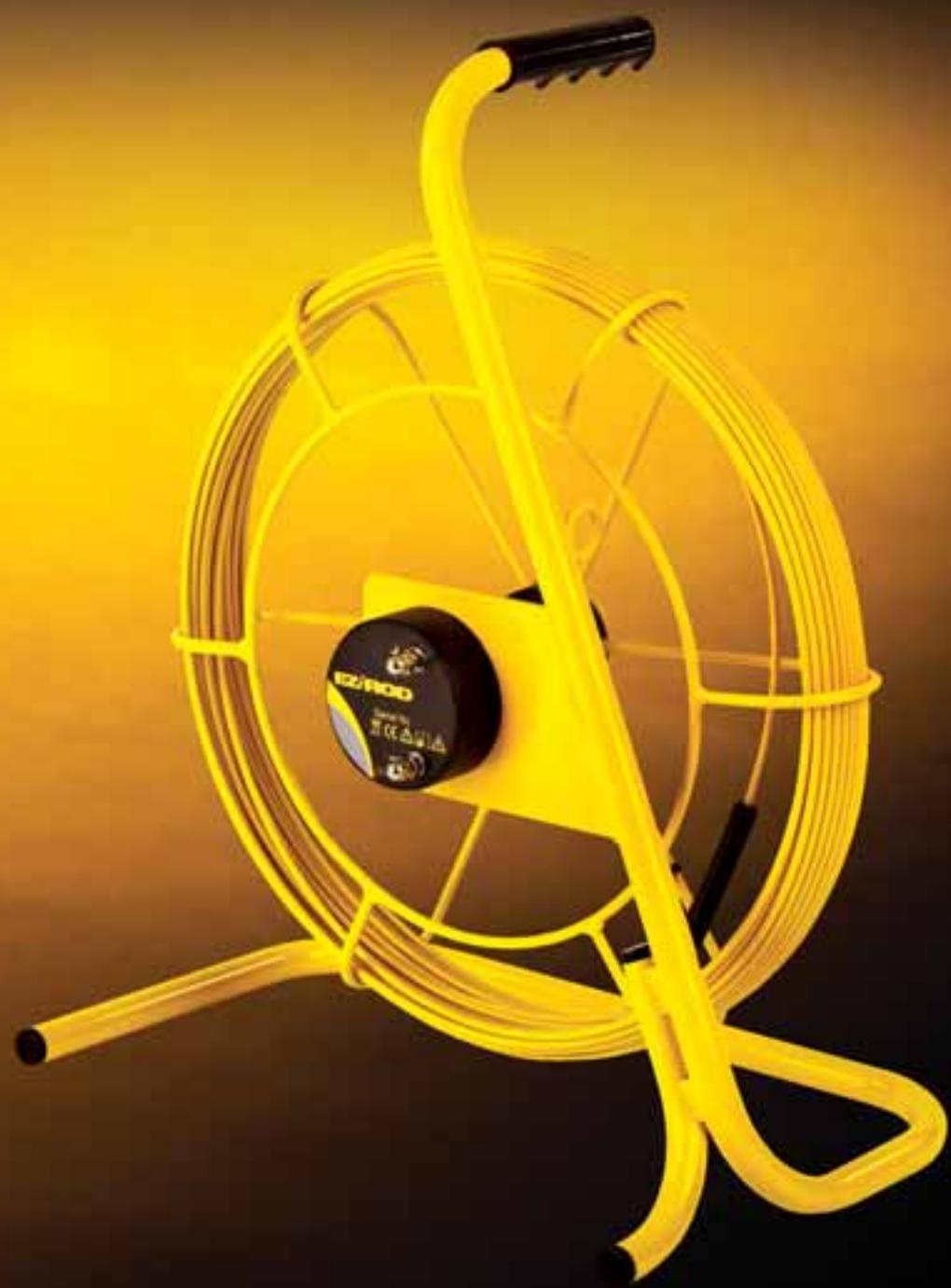
### Locator Pack

Consisting of Mains smart charger, AA Type Battery Pack, Charging Cradle.

### Extras

- Rechargeable D Cell Pack
- Rechargeable AA Cell Pack
- Additional D Cell Charging Cradle
- Additional AA Cell Charging Cradle
- Vehicle Charger





# Specifications

## EZiCAT i500xf

Frequency / Mode	Power mode 50 Hz or 60 Hz, Radio mode 15 kHz to 60 kHz Transmitter mode 8 kHz, 33 kHz, 512 Hz, 640 Hz. Auto mode = Power + Radio mode
Typical detection range	Power to 3m, Radio to 2m, Transmitter Mode – Dependant on Transmitter or Sonde
Protection	Conforms to IP54
Bluetooth	Not available
Batteries	6 x AA alkaline (IEC LR6 supplied)
Battery life	40 hours intermittent use (at 20°C)
Weight	2.7kg including batteries

## EZiCAT i550xf

Frequency / Mode	Power mode 50 Hz or 60 Hz, Radio mode 15 kHz to 60 kHz Transmitter mode 8 kHz, 33 kHz, 512 Hz, 640 Hz. Auto mode = Power + Radio mode
Typical detection range	Power to 3m, Radio to 2m. Transmitter Mode – Dependant on Transmitter or Sonde
Depth estimation	Line Mode – 0.3 to 3m. Sonde Mode – 0.3 to 9.9m. 10% of depth in Line or Sonde Mode
Protection	Conforms to IP54
Bluetooth	Not available
Batteries	6 x AA alkaline (IEC LR6 supplied)
Battery life	40 hours intermittent use (at 20°C)
Weight	2.7kg including batteries

## EZiCAT i600xf

Frequency / Mode	Power mode 50 Hz or 60 Hz, Radio mode 15 kHz to 60 kHz Transmitter mode 8 kHz, 33 kHz, 512 Hz, 640 Hz. Auto mode = Power + Radio mode
Typical detection range	Power to 3m, Radio to 2m, Transmitter Mode – Dependant on Transmitter or Sonde
Protection	Conforms to IP54
Bluetooth	As Standard
Batteries	6 x AA alkaline (IEC LR6 supplied)
Battery life	40 hours intermittent use (at 20°C)
Weight	2.7kg including batteries
Compatibility	CSV file compatibility program
Memory size	32Mb memory
Capacity	80hrs of data

## EZiCAT i650xf

Frequency / Mode	Power mode 50 Hz or 60 Hz, Radio mode 15 kHz to 60 kHz Transmitter mode 8 kHz, 33 kHz, 512 Hz, 640 Hz. Auto mode = Power + Radio mode
Typical detection range	Power to 3m, Radio to 2m, Transmitter Mode – Dependant on Transmitter or Sonde
Depth estimation	Line Mode – 0.3 to 3m. Sonde Mode – 0.3 to 9.9m. 10% of depth in Line or Sonde Mode
Protection	Conforms to IP54
Bluetooth	As Standard
Batteries	6 x AA alkaline (IEC LR6 supplied)
Battery life	40 hours intermittent use (at 20°C)
Weight	2.7kg including batteries
Compatibility	CSV file compatibility program
Memory size	32Mb memory
Capacity	80hrs of data

**EZiTEX t100xf**

Operating transmission frequencies	8.192 kHz, 32.768 kHz, mixed 8/33, 512 Hz, 640 Hz
Output power	4 levels
Induction (8 kHz, 33 kHz)	Up to 1W max
Direct connection (100 Ohms)	Up to 1W max when connected to a buried service with an impedance of 100 Ohms
Battery type	4 x D alkaline (IEC LR20), supplied
Battery life	(typical use at 20°C) 30hrs intermittent use
Weight	2.4kg including batteries
Dimensions	105mm (H) x 190mm (D) x 235mm (W)
IP rating	(case lid closed) IP65
IP rating	(case lid open) IP54

**EZiTEX t300xf**

Operating transmission frequencies	8.192 kHz, 32.768 kHz, mixed 8/33, 512 Hz, 640 Hz
Output power	4 levels
Induction (8 kHz, 33 kHz)	Up to 1W max
Direct connection (100 Ohms)	Up to 3W max when connected to a buried service with an impedance of 100 Ohms
Battery type	4 x D alkaline (IEC LR20), supplied
Battery life	(typical use at 20°C) 20hrs intermittent use
Weight	2.4kg including batteries
Dimensions	105mm (H) x 190mm (D) x 235mm (W)
IP rating	(case lid closed) IP65
IP rating	(case lid open) IP54

**EZiROD**

Protection	Conforms to IP54 (30/50/80 metre coil of copper conductor sheeted by fibre glass)
Weight	3kg/3.25kg/3.5kg

**Dual Frequency Sonde**

Operating transmission frequencies	8.192 kHz, 32.768 kHz
Battery type	1 X LR6 (AA) alkaline
Battery life (typical use at 20°C)	40hrs intermittent use at 20°C/68°F in 8 kHz mode or 33 kHz mode
Weight	0.18kg
Dimensions	38mm (H) x 120mm (W)



Dealer stamp

Cable Detection Limited  
A Leica Geosystems company

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More information on cable avoidance tools at [cabledetection.co.uk](http://cabledetection.co.uk)

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