

3M

Dynatel™

Electronic Marker System Marker Locator 1420-iD

Electronic Marker System Marker Locator 1420E-iD



GPS Interface Allows Accurate Mapping

INNOVATIVE TECHNOLOGY FOR LOCATING UNDERGROUND UTILITIES WITHOUT ANY DOUBT

3M™ Dynatel™ Electronic Marker System (EMS) Marker Locators 1420-iD/1420E-iD are microprocessor-based systems that incorporate advanced digital signal processing techniques to quickly and efficiently locate underground facilities—even years after construction or maintenance.

Designed to be more accurate, faster and more integrated, the 1420-iD/1420E-iD EMS marker locators allow you to accurately and easily:

- Locate, read and write to 3M RFID markers
- Pinpoint the depth and location of all existing models of properly installed underground passive EMS markers
- Conduct direct depth reading of markers
- Locate two different marker frequencies simultaneously

ADVANCED FEATURES DETECT MORE INFORMATION ABOUT UNDERGROUND UTILITIES

A feature exclusive to the 1420-iD/1420E-iD locators is the ability to read, write and lock programmed information into the 3M™ Electronic Marker System iD Ball Markers 1400 Series. Information such as a pre-programmed unique identification number, facility data, owner information, application type, placement date and other details from up to 100 markers can all be stored with date/time stamp and GPS coordinates*, and transmitted back to your PC through a standard RS232 serial port for enhanced resource management.

ACCURATE EVEN IN CONGESTED AREAS

The 1420-iD/1420E-iD locators are unaffected by metal conduit or pipe, metallic conductors, fences, AC power or electronic markers for other utilities. Multiple markers located at close proximity can be read individually using this system.

* When connected to standard NMEA compliant GPS devices.



3M™ Dynatel™ Electronic Marker System Marker Locator 1420-iD

3M™ DYNATEL™ ELECTRONIC MARKER SYSTEM MARKER LOCATORS 1420-iD/1420E-iD

A SIMPLE, EASY-TO-USE SYSTEM

Lightweight and compact, the locators are rugged, ergonomic and require very little operator training. A large bright backlit digital liquid crystal display screen and soft-key operation make them easy to understand and use for more precise locates. A “memory” feature remembers operator set-up from the previous use. A standard RS232 communications port allows interface to an external computer for uploading/downloading of data, unit configuration and remote software upgrades. The system is estimated to operate for more than 25 hours on eight AA alkaline batteries.

EXCLUSIVE GPS SYSTEM ADDS ACCURACY WITH EASE

The 3M™ Dynatel™ Electronic Marker System Marker Locators 1420-iD/1420E-iD are now compatible with select GPS/GIS field mapping instruments for real-time mapping of marker placement. The customized Dynatel interface commands the GPS/GIS device allowing even a generalist field technician to perform real-time mapping. It’s a simple system for mapping marker placement and saving information directly into CAD and GIS systems. The electronic export of this information in GIS format creates an automated paperless system for records updating, making positive locates in the field easier than ever. Visit our website at <http://www.3m.com/dynatel> for more details.



3M™ Dynatel™ Electronic Marker System Marker Locator 1420-iD

FEATURES

Large backlit, high-resolution graphic display	Locator PC tools software
PC interface via standard RS232 serial port	RFID marker read/write capability
User-configurable features and interface	Dual marker frequency search-simultaneous
Detects all seven EMS marker frequencies	RFID Marker depth estimation

PHYSICAL SPECIFICATIONS

	SIZE (H X W X D) CM (IN.)	WEIGHT (INCLUDING BATTERIES)
Receiver	26.7 x 11.8 x 76.2 (10.25 x 4.7 x 30)	1.9 kg (4 lb.)
Shipping	N/A	5.3 kg (11.5 lb.)



3M™ DYNATEL™ ELECTRONIC MARKER SYSTEM MARKER LOCATORS 1420-ID/1420E-ID

ENVIRONMENTAL SPECIFICATIONS

Operating temperature	-20° C to 50° C (-4° F to 122° F)
Storage temperature	-20° C to 70° C (-4° F to 158° F)
Regulatory	CE (Export Models Only)
Standard	IP54

ELECTRICAL SPECIFICATIONS

Marker compatibility	All 3M markers (telephone, gas, communication, power, water, wastewater and general purpose)
Dual marker mode	Any two marker frequencies simultaneously
Detection range	Exceeds maximum marker depth specifications
Marker read range	1420 - 1.5 m (5 ft.) to all ID ball markers 1420E - 1.2 m (4 ft.) telephone, gas, CATV, wastewater 1.0 m (3.3 ft) water, power
Marker write range	30 cm (1 ft.)
RFID Marker depth measurement accuracy	±10% ±1/8" (2 in.) up to marker depth specifications
Memory storage with date/time stamp	Read marker records 100 Written marker records 100 User defined ID templates 32
Marker depth memory storage	Five with date/time stamp
Power	Battery type: eight AA size, alkaline Typical battery life: 25 hours
Display	Large graphic high-contrast LCD with backlight
Speaker	0.25W
Headphone jack	Standard mini-jack
Serial port	Standard RS232 serial with DB9 connector

ORDERING INFORMATION

PRODUCT NUMBER	DESCRIPTION
1420	EMS-ID marker locator with ID read/write
1420E	EMS-ID marker locator with ID read/write (CE Approved Export Model)

To order, call 800/426 8688. For more information, please contact your local 3M representative.

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