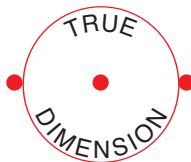


# MX TD



## Noncontact Temperature Measurement



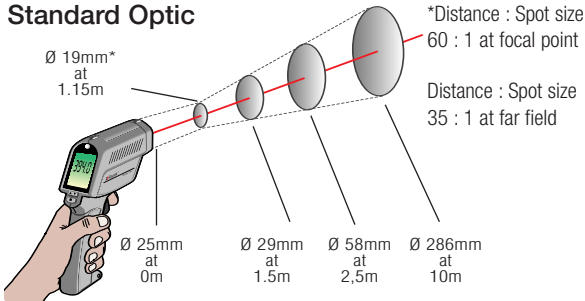
### When the job demands precision and accuracy.

Broad temperature range, superior optics and the True Dimension™ double-bright laser sighting system make the MX series the most advanced portable thermometer in the industry. The MX series featuring the True Dimension coaxial laser sighting is the only thermometer designed with precise infrared beam tracking, resulting in more accurate measurement.

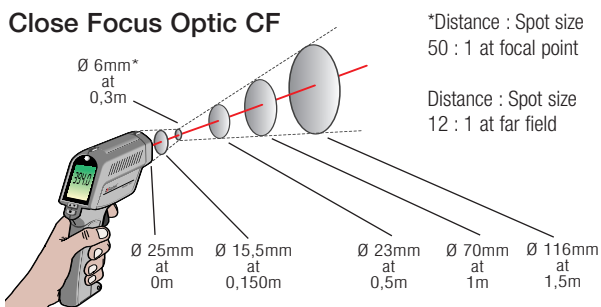
## True Dimension™ Laser Sighting

True Dimension is a coaxial laser sighting system that shows the exact measurement area from all distances. This advanced coaxial system uses an extra bright\* 635nm, 3-point laser sighting (tested to the same safety and power standards as less bright laser sights) to clearly highlight the targeted area.

### Standard Optic



### Close Focus Optic CF



## MX Series Accessories and Options

Both models include a user guide and a hardshell carrying case.

The MX4+ TD additionally includes: ■ DataTemp MX software ■ RS232 computer cable ■ Plug-in Power Supply (110 or 220 volt) ■ Thermocouple K probe

### MX2 Options

- Close Focus
- Sub Zero
- Padded Pouch w/Belt Clip
- Intrinsically safe model

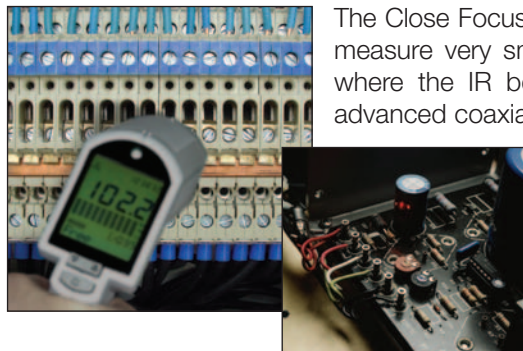
### MX4+ TD Options

- Close Focus
- Sub Zero
- Thermistor (NTC probe)
- Portable thermal printer
- Thermal printer paper (5 rolls)
- mV/degree output cable
- Padded Pouch w/Belt Clip

### Sub Zero Option

The Sub Zero (SZ) model option is designed for measuring lower temperatures. The SZ model uses an IR sensor specially calibrated to measure temperatures from  $-50^{\circ}\text{C}$  through  $500^{\circ}\text{C}$ .

### Close Focus Option



The Close Focus (CF) option lets you accurately measure very small areas at the Focus Point—where the IR beam narrows. Paired with the advanced coaxial laser sighting, extremely small objects of 6 mm diameter can be easily measured. Ideal for electrical maintenance and refrigeration troubleshooting.

## Advanced Display



With 30 pre-set common material emissivity values from which to choose, and values adjustable in increments of 0.01, the Raytek MX series helps make temperature measurements more accurate when checking any surface material. You can even add your own material names and value with the MX4+ TD.

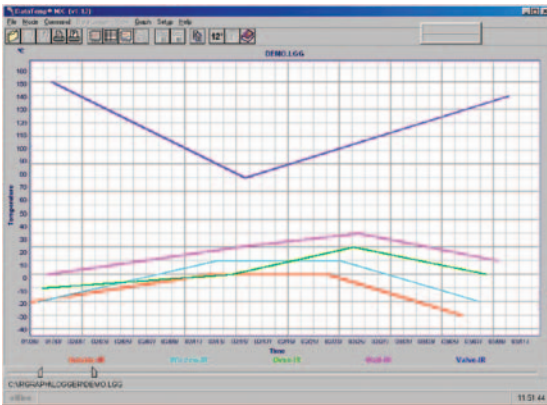
The MX4+ TD model stores up to 100 temperature readings for easy retrieval, and when used with the DataTemp MX Software, can store customized location names, alarms, and emissivity for data logging and mistake-free inspections and reliable data recording.



\* perceived to be twice as bright as normal lasers with the same power by the human eye.



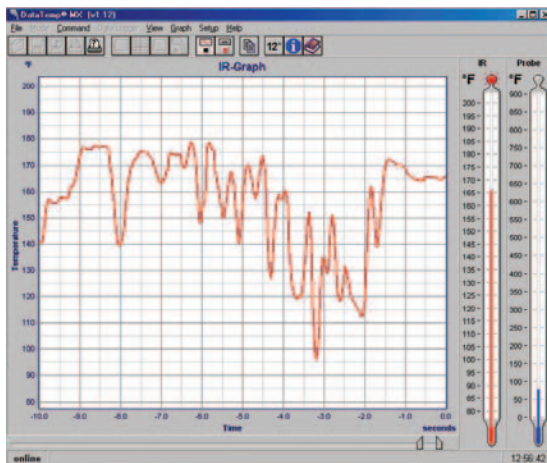
# DataTemp MX Software for Condition Monitoring and Process Control



Easily see temperature trends and potential equipment problems by graphing data accumulated with the MX's data logging feature.

No.	Name	Date	Time	IR-Temp	IR-Min	IR-Max	IR-Avg	Probe	EMS	Material Name	Lo-Alarm	Hi-Alarm	Valid
1	went	8/29/01	12:20:38 PM	68.4	68.4	69.0	69.2	0.50		Brass_oxid	32.0	95.0	yes
2	water outlet	8/29/01	12:20:28 PM	64.6	64.6	64.6	64.6	0.95		Plastic	50.0	65.0	yes
3	platform	8/29/01	12:20:04 PM	75.2	74.8	75.2	75.0	0.95		Plastic	32.0	98.0	yes
4	container wall	8/29/01	12:19:56 PM	90.4	90.2	90.4	90.2	0.95		Concrete	32.0	95.0	yes
5	Motor	8/29/01	12:19:15 PM	173.4	142.4	173.4	147.4	0.80		Steel_oxid	65.0	100.0	yes
6	BREAKER 1	8/29/01	12:16:55 PM	150.6	141.4	150.6	143.2	0.95		CU_oxidz	32.0	110.0	yes
7	BREAKER 2	8/29/01	12:16:05 PM	79.8	79.8	80.6	80.2	0.95		CU_oxidz	32.0	110.0	yes
8	BREAKER 3	8/29/01	12:16:14 PM	81.4	75.2	82.4	79.0	0.95		CU_oxidz	32.0	110.0	yes
9	BREAKER 4	8/29/01	12:16:28 PM	104.8	102.0	105.6	103.6	0.50		Brass_oxid	32.0	122.0	yes
10	BREAKER 5	8/29/01	12:16:34 PM	87.2	85.8	87.4	86.4	0.80		Steel_oxid	32.0	122.0	yes
11	BREAKER 6	8/29/01	12:16:38 PM	94.4	84.2	94.6	84.4	0.95		CU_oxidz	32.0	122.0	yes
12	BREAKER 8	8/29/01	12:16:42 PM	94.8	94.8	99.0	98.4	0.95		Free	32.0	122.0	yes
13	BREAKER 10	8/29/01	12:17:00 PM	82.0	82.0	82.4	82.2	0.95		Free	32.0	122.0	yes
14	BREAKER 11	8/29/01	12:17:23 PM	162.0	81.4	177.0	149.2	0.95		Free	32.0	122.0	yes
15	BREAKER 12	8/29/01	12:18:59 PM	85.2	78.4	109.0	88.8	0.95		Free	32.0	122.0	yes
16	BREAKER 13	7/30/01	12:44:58 PM	79.6	79.2	79.6	79.4	0.95		Free	32.0	122.0	yes
17	BREAKER 14	8/29/01	12:17:40 PM	105.2	80.2	174.2	110.4	0.95		Free	32.0	122.0	yes
18	BREAKER 15	8/29/01	12:17:45 PM	79.0	79.0	79.0	79.0	0.95		Free	32.0	122.0	yes
19	BREAKER 16	8/29/01	12:17:54 PM	122.2	79.6	174.0	113.8	0.95		Free	32.0	122.0	yes
20	BREAKER 17	8/29/01	12:21:13 PM	111.0	78.2	119.0	99.8	0.95		Free	32.0	122.0	yes
21	BREAKER 18	8/29/01	12:21:47 PM	87.8	77.4	142.8	93.0	0.95		Free	32.0	122.0	yes

The DataTemp MX software makes it easy to error-proof inspection routes by giving names, alarm points and emissivities to locations.



The MX4+ TD can be used to monitor, graph, and record real-time temperature changes with the DataTemp software.

The Export Format dialog box allows users to customize the output of their data exports. It includes options for time format (Floating point or Regular), time mode (Absolute or Relative to header), date order (day/month/year, month/day/year, year/day/month, or year/month/day), and delimiter (Date, Time, or Date / Time). It also has checkboxes for Leading Zero, Show date, Show time, and 24 Hours. The Delimiter section has input fields for Date and Time, and radio buttons for Tab and Space. A sample output is shown as '02.12.1998 23:35:36,38'.

The DataTemp MX software provides a convenient way to export temperature data files in a format that can be used by programs such as Access®, Excel®, and condition monitoring programs.

Visualize, systematically maintain and analyze temperature data using Windows compatible Raytek DataTemp MX software

## Graph

- Visually find and review trends instantly through graphs
- Simultaneously graph results while continuously monitoring temperatures
- Quickly compare temperatures of up to 5 log locations for trends or anomalies
- Display infrared and/or probe temperature trends over time
- View infrared and probe values continuously on thermometer sidebar

## Data Log

- Create recognizable names for inspection locations
- Track both infrared and probe temperature trends
- Tailor high/low alarms per individual inspection location
- View min, max, and average infrared and probe temperatures
- Create and customize emissivity tables for each inspection location
- Store up to 10,000 data points in a file

## Report View/Print

- Customize report views and printing formats
- Generate time and date-stamp printouts for accurate records
- Export data as text files for integration with Maintenance, Reliability, Operations (MRO) systems and other database programs

# MX Specifications and Features

	MX2	MX4+
Temperature Range	-30° to 900°C (-50° to 500° with SZ option)	
Accuracy (Assumes ambient operating temperature of 23°C)	±0.75% of reading or ±1°C whichever is greater	
Repeatability	≤ ±0.5 of reading or ≤ ±1°C, whichever is greater	
Response Time	250 mSec (95% of reading)	
Spectral Response	8 to 14µm, thermopile detector	
Distance to Spot (D:S)	60:1 (50:1 with Close Focus Option)	
Minimum Measurement Diameter	19mm (6mm with Close Focus Option)	
Display Resolution	0.1°C of reading up to 900°C	
Temperature Display	°C or °F selectable	
Ambient Operating Temp.	0 to 50°C	
Storage Temperature	-20 to 50°C	
Tripod Mount	1/4-20 UNC	
Power	2 AA Batteries	2 AA Batteries /AC adapter
Power Supply (110 or 220V), PS232 Computer Cable, 1.5 m, K thermocouple probe	—	✓
Laser Class II	3-point laser sighting (Meets IEC Class 2 & FDA Class II requirements)	
Intrinsically safe model (meets II 2 G EEx ia IIC T4)	✓	—
Maximum and Minimum Temperature	✓	✓
Audible/Visible High Alarm	✓	✓
Differential and Average Temperature	—	✓
Bar Graph Display	✓	✓
Adjustable Emissivity (from 0.1 to 1.0 by 0.01)	✓	✓
100 Points Data Logging	—	✓
Display Hold	✓	✓
LCD Backlit	✓	✓
Data Graphing Software (Windows compatible)	—	✓
Data Output: RS232 or 1mV per degree	—	✓
DKD Traceable Calibration Certification	Option	Option
Hard Carrying Case	✓	✓
Weight	480 g	

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For up-to-the-minute features



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