

# TroubleShooter LE™

**Portable High-Speed Troubleshooting Camera  
For Plant Maintenance & Field Service Engineers**

The **TroubleShooter LE Point & Shoot High-Speed Camera** is specifically designed for plant maintenance and field service operations, including line setup and changeovers, machinery diagnostics and general troubleshooting. It allows plant maintenance and field service engineers and technicians to see, measure and understand high-speed problems that happen too fast to see with the unaided eye.

For plant maintenance engineers, the ability to quickly identify and fix the problems that cause work stoppages on high-speed production and packaging lines means that they can get the lines back up to full production faster. Unlike bulky high-speed camera systems of the past, the point-and-shoot **TroubleShooter LE** requires no complicated setup. It's easy to use...so it will get used.

For field service departments, the **TroubleShooter LE's** small size and portability make it an indispensable troubleshooting tool... a "mechanical engineer's oscilloscope". Service engineers can reduce the time spent at the customer's site by eliminating "trial and error" troubleshooting. When they can see the problem, they can fix it!

Fast service calls improve customer uptime and satisfaction and, since each customer service call takes less time, overall service costs are usually less. Field service engineers can operate more efficiently and travel costs for overnight stays may also be significantly reduced.

**Fast.** Record up to 1000 frames per second and stop the action.

**Portable.** Small, light weight, battery powered.

**Easy.** Capture thousands of images with the push of a button, review them on the built-in screen and save them to a Compact Flash card.

**Connected.** Communicate between TroubleShooter LE and your laptop through the built-in USB-2.0 port.

**Light Sensitive.** No additional lighting required for most applications.



Companies can **improve operational efficiency and save money** by:

- Reducing jams
- Speed up line setup and changeovers
- Lowering scrap and rejected material costs
- Reducing downtime

*See what you've been missing*

**FASTEC IMAGING™**

# TroubleShooter LE

## POINT & SHOOT High-Speed Camera

### SPECIFICATIONS

**MODELS** TroubleShooter LE 250, TroubleShooter LE 500 and TroubleShooter LE 1000 (Monochrome and Color).

**SENSOR** CMOS array, 8-bit monochrome resolution, 24-bit color resolution.

**SHUTTER** 1x, 2x, 3x, 4x, 5x, 10x and 20x the recording rate.

**RECORDING MODES**

**Manual**  
Begins recording when the record button is pushed. Continues to record and store images in memory until the stop button is pushed.

**Trigger**  
Begins recording when the record button is pushed. Continues to record and store images in memory until an external trigger signal is received. The adjustable trigger position determines how many frames are stored before and after the trigger signal is received.

**PLAYBACK MODES** Single step mode plus auto playback at 1, 2, 3, 4, 5, 10, 15, 25, 30, 50, 60, 125 and 250 frames per second, forward and reverse.

**DISPLAY** Built-in LCD color digital display (14cm W x 10cm H).

**OPERATOR CONTROLS** Power On/Off, Function Select/Change, Record, Stop, Download.

**I/O CONNECTORS** DC Power, USB 2.0 Port, Compact Flash, Trigger-In, Sync-In, Sync-Out, Video-Out.

**TRIGGER INPUT** Contact closure or standard TTL signal, 3 to 30 VDC.

**MOUNTS** C-mount lens mount, 1/4-20 tripod mount.

**POWER SUPPLY** Rechargeable Battery Pack (included) or 110/220 VAC adapter (included).

**SIZE & WEIGHT** 19cm W x 12cm H x 6cm D; 0.8 kg with Battery Pack.

Recording Rate (fps)	Resolution	Standard Memory - 512MB		Enhanced Memory - 1GB	
		Total Frames	Time (sec)	Total Frames	Time (sec)
50	640 x 480	1319	26	2637	53
60	640 x 480	1319	22	2637	44
125	640 x 480	1319	11	2637	21
250	640 x 480	1319	5	2637	11
50	640 X 240	2655	53	5309	106
60	640 X 240	2655	44	5309	88
125	640 X 240	2655	21	5309	42
250	640 X 240	2655	11	5309	21
500	640 X 240	2655	5	5309	11
50	440 x 330	2773	55	5546	111
60	440 x 330	2773	46	5546	92
125	440 x 330	2773	22	5546	44
250	440 x 330	2773	11	5546	22
500	440 x 330	2773	6	5546	11
50	320 x 240	5310	106	10619	212
60	320 x 240	5310	88	10619	177
125	320 x 240	5310	42	10619	85
250	320 x 240	5310	21	10619	42
500	320 x 240	5310	11	10619	21
1000	320 x 240	5310	5	10619	11

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Specifications subject to change without notice.

