

eclipse™

THERMAL IMAGING JUST GOT PERSONAL.

A fully equipped crew means an advanced thermal imager in the lead, supported by an Eclipse in the hands of every firefighter. No one is left in the dark. Introducing the first low-cost, ultra-small form factor handheld thermal imager...built Bullard Tough.™



Personal-Issue Thermal Imaging

Eclipse was designed to equip each firefighter with thermal imaging technology. Shattering price barriers, Eclipse gives fire departments of all sizes the opportunity to bring thermal imaging to more firefighters.

Navigational and Search & Rescue Thermal Imaging

Eclipse can help prevent disorientation in a fire and assist in search & rescue. This personal-issue thermal imager is easy to use and helps increase firefighter safety:

- Ultra-small form factor is super lightweight at only 1.5 lbs.
- Easy, one-button operation
- Designed to clip to firefighter gear
- Enhances crew accountability
- Speeds searches and increases efficiency
- Thermal imager management system

Built Bullard Tough

Eclipse – with its small and lightweight form factor – is engineered Bullard Tough. Eclipse is designed to withstand the extreme environments firefighters face, and yet still be small enough to easily clip to firefighters' gear. Eclipse can be purchased with an Eclipse Powerhouse™ charger to help ensure your TI is always duty-ready. A retractable strap can be added to keep your hands free and your Eclipse safe. Bullard also offers an extended warranty, SmartLine™ online training and a desktop charger.

At last, thermal imaging is in the grasp of every fire department. Another innovation from the leader in thermal imaging.

Integrated Software System

Each Eclipse Thermal Imager comes with Eclipse Control Panel software, which gives you access to customized display graphics, an advanced troubleshooting system, and future downloadable upgrades.



www.bullard.com



Technical Specifications



Overall TI Unit

Weight with battery	24 oz.
Without battery	20 oz.
Dimensions	Height: 3.4" Length: 6.5" Width: 4"
Heat Test	500°F for 5 minutes 300°F for 13 minutes
Water Resistance	IP67
Impact/Drop Test	No functional damage, 6' drop

Casing

Shell Material	Ultem® Thermoplastic
Sealing	Silicone and Neoprene®
Display Cover	Polycarbonate

Core/Detector

Type	Uncooled Microbolometer with Digital Processing,
Resolution	Pixel Smoothing
Sensing Material	80 x 60 array
Spectral Response	Vanadium Oxide
Thermal Stabilization	7-14 Microns
Update Rate	0°F to 175°F 30 Hz
Temperature Sensitivity	< 0.075°C
Video Output	NTSC
NETD	< 75mK
Dynamic Range	1020°F
Pixel Pitch	30 µm
Thermal Time Constant	11ms
Video Polarity	White-Hot

Lens

Material	Germanium
Lens Size	14mm
Field of View	33°V x 45°H
Focus	Fixed 3' to infinity
Speed	f/1.25

Electrical System

Power Source	NiMH Rechargeable Battery or Alkaline Batteries (2 cells)
Output	2.4V nominal
Capacity	2350 mAh
Operating Time	> 3 hours nominal
Start Up Time	< 4 seconds
Charger Single Battery	120 VAC or 12 VDC
Switch Cycle Test	1,000,000 cycles
Battery Life	1,000 charge cycles
Battery Weight	4 oz.
Recharge Time	2 hours nominal

Display

Type	Digital, Liquid Crystal Display (LCD)
Size	2.4" Diagonal TFT Active Matrix
Dot Pitch	0.3mm x 0.1525mm
Dot Format	160 x RGB x 234
Pixels	112,320
Pixel Configuration	DELTA
Back Light	L.E.D.
Brightness	250 cd/m2
Viewing Angle	Left/Right = 50°, Up/Down = 35°/15°

Accessories

Eclipse Battery
Charger Base



Eclipse Powerhouse™
Charger

Americas:
E.D. Bullard Company
1898 Safety Way • Cynthia, KY 41031-9303
Toll free: 877-BULLARD (285-5273)
Tel: 859-234-6616 • Fax: 859-234-8987
www.bullard.com

Europe:
Bullard GmbH
Lilienthalstrasse 12
53424 Remagen • Germany
Tel: +49-2642 999980 • Fax: +49-2642 9999829
www.bullardextrem.com

Asia-Pacific:
Bullard Asia Pacific Pte. Ltd.
LHK Building
701, Sims Drive, #04-03 • Singapore 387383
Tel: +65-6745-0556 • Fax: +65-6745-5176
www.bullard.com

©2009 Bullard. All rights reserved.
Eclipse, Powerhouse and SmartLine are trademarks of Bullard.
Ultem is a registered trademark of General Electric.
8261 (0309)