

cityofnovi.org

CITY of NOVI CITY COUNCIL

Agenda Item M
Nov. 10, 2008

SUBJECT: Approval to purchase two (2) replacement Thermal-Imaging Cameras from ISG Thermal Systems USA, Inc. through Michigan Inter-governmental Trade Network (MITN) and the city of Troy bid, in the amount of \$16,400.

SUBMITTING DEPARTMENT: Fire *JS*

CITY MANAGER APPROVAL: *AWA*
FCJP

EXPENDITURE REQUIRED	\$16,400
AMOUNT BUDGETED	\$21,600
APPROPRIATION REQUIRED	\$ NA
LINE ITEM NUMBER	101-337.00-982.00

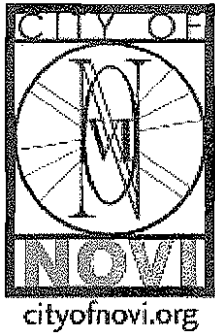
BACKGROUND INFORMATION:

The current thermal-imaging cameras are 10 years old and have fulfilled their useful life. New technology provides video imaging in full color with an on-screen digital temperature display. This replacement equipment is smaller, light-weight and easier to operate to help locate unconscious or trapped victims or firefighters. In routine situations, these cameras help to locate hot spots behind walls, overheated electrical and HVAC equipment and malfunctioning chimneys and fireplaces. This bid pricing is extended from the city of Troy bid dated 9/5/07 and available to members of Michigan Inter-governmental Trade Network (MITN). This request is to replace two (2) Thermal-Imaging Cameras. One will be stored on Engine 1 and one on Engine 3 (located respectively at stations 1 & 3).

RECOMMENDED ACTION: Approval to purchase two (2) Thermal-Imaging Cameras from ISG Thermal Systems USA, Inc. through Michigan Inter-governmental Trade Network (MITN) and the city of Troy bid, in the amount of \$16,400.

	1	2	Y	N
Mayor Landry				
Mayor Pro Tem Capello				
Council Member Crawford				
Council Member Gatt				

	1	2	Y	N
Council Member Margolis				
Council Member Mutch				
Council Member Staudt				



TO: CLAY PEARSON, CITY MANAGER
FROM: FRANK A. SMITH, FIRE CHIEF *FS*
SUBJECT: THERMAL IMAGING CAMERA REPLACEMENT
DATE: OCTOBER 30, 2008

This memo is to recommend the replacement of two (2) thermal imaging cameras currently in operation at fire stations one and three. During budget discussions last winter, replacement of all four (4) cameras were discussed and the final plan determined that two cameras were to be replaced during FY 2008/09 and two cameras would be requested for the FY 2009/10 budget year.

The current cost of the two cameras is \$18,456 total and less than the originally budgeted amount of \$21,600. As a result of the Michigan Inter-governmental Trade network (MITN), the City of Novi is able to utilize a bid from the City of Troy and optimize a \$5,200 savings.

The current thermal imaging cameras on E-1 and E-3 are both ten years old and well beyond their usable life. The current models are used to differentiate temperature differentials of objects. The screen readout is varying shades of gray and the unit is bulky and has been repaired several times.

The new thermal imaging cameras will be a full-color visual display with a digital temperature readout. In addition the replacement cameras are smaller, light-weight and much more sophisticated technology in battery operation and ease of use.

The most critical use of thermal imaging cameras is to locate unconscious or disoriented victims or firefighters during a fire. Routine use of this equipment is to find hidden hot spots in walls, discover flaws in fireplaces and chimney flues and even to find overheated light fixture ballasts in gymnasiums or large floor areas. All of this can be accomplished by firefighters without ladders or hand tools and without taking apart light fixtures.

International Sales

Corporate Profile



ISG
Thermal Systems USA, Inc.

Home | Cameras | FAQ | Downloads | Request Information

ELITE | TALISMAN XL | OPTIONS & ACCESSORIES

Toll Free **877-SEE-FIRE**

ELITE

- Camera Details
- Specifications
- Video Gallery
- Options & Accessories
- Warranty Information
- Training
- DOWNLOAD BROCHURE**
- USER MANUALS**
- BID SPECIFICATIONS**



EXCLUSIVE SAFETY FEATURES FOR EXTRA HEADROOM

K1000 ELITE SPECIFICATIONS

Electronics

Sensor Type
Resolution
Spectral Response
NEDT
Dynamic Range
Mode Switch Time
Noise Reduction
Update Rate
External Video
Optics Material
Field of View
Optics F Stop
Nominal Start-up

Vanadium Oxide Microbolometer
320X240
8-14 microns
50 mK nominal
Over 2000°F in Thousand Plus Mode
0.08 seconds
Megapicture System
4,608,000 scene elements per second
NTSC
Germanium
59°
F:/0.8
Under 5 seconds

Temperature Measurement

Measurement
Measurement Range
Resolution
Repeatability
Emissivity

FPA Center Pixel Area
Up to 2100°F
+/- 1°F
+/- 1°F
.95 Preset

Colorization

Availability
Type

Standard on all K1000 ELITE cameras
Yellow, red, temperature dependent see-through color.

Physical

Weight
Housing
Rubber Parts
Display Cover
Waterproofing
Drop Test

Under 3 pounds
Radel-R High Heat Thermoplastic
Neoprene
Polycarbonate
IP67 - Immersion up to 3 feet
6 Feet

Battery

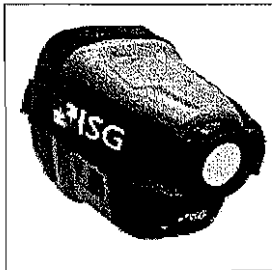
Operating Time
Low Battery Warning
Recharge Time

3 Hours
Displayed on-screen
2.5 Hours

Warranty

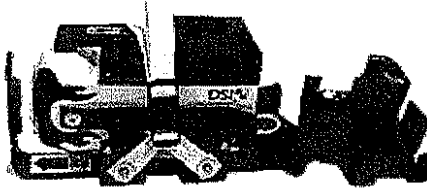
Base Warranty
Extended Warranty

One Year
Up to 2 additional years



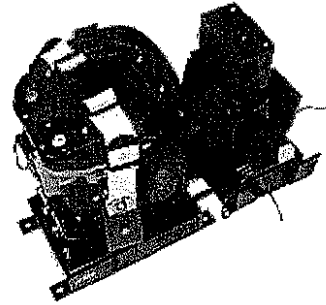
ISG Thermal Systems USA, Inc
305 Petty Road, Lawrenceville, GA 30043
Phone - 877-733-3473 :: Email - info@isgfire.com
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The K90 Fast Attack Truck Mount provides a secure holder for the imager while the vehicle is in motion. The separate battery-charging bracket maintains the imager's spare battery as well.



K1000 ELITE Fast Attack Truck Charger

With a quick-release mechanism and automatic charging capability, were designed to ensure that the imager will be totally operational when the apparatus arrives at the scene.



TAC-GRIP HANDLE Option

This detachable, multi-use-grip enables you to use your hands for other tasks while holding the camera.

- Pull Ceiling And Wallboard
- Use Radios
- Climb Ladders
- Dock Regulators
- Pull Hose



DDT DIGITAL DIRECT TEMPERATURE

DDT gives firefighters the ability to observe the temperature of objects from a distance. The objects' temperature are displayed numerically on-screen.



Digital Zoom
(K90 Only Optional)

The Digital Zoom capability allows the scene information to be brought closer to the viewer more quickly from a safe distance. This optional feature can be used when evaluating warehouses, long hallways, attics, large structure size-up, search and rescue, RIT recovery and hazmat.

