

# IS1000

## “Ruggedized” Infrared Imaging System for Equipment-Operator Vision Enhancement



Passive infrared technology requires fewer parts, less space, and is less expensive and easier to maintain than active infrared. Passive infrared renders a clearer image through environmental obstructions.

### OPTIONS

- Compact screen sizes, 10.4" (26.4cm), 12.1" (30.7cm)
- IP66 dust tight monitor
- Armored wiring harness
- Heated camera lens
- Low voltage (12V, 24V) and DC-DC power supplies
- Monitor glare guard
- Imager rock guard
- PAL video output

Systems can be further customized for optimal performance in unique applications. Please contact Phoenix Products Company for details.

The IS1000 is a sealed infrared imaging system “ruggedized” to operate in severe environments characterized by airborne debris, shock, and vibration. Designed for installation on mining equipment such as shovels, haul trucks, rock crushers, and draglines, the imager converts the heat signatures of objects in its field of view to images displayed on an in-cab monitor.

By enabling operators to “see” through dust, fog, rain, snow, and smoke, the IS1000 enhances safety and increases productivity.

### SYSTEM SPECIFICATIONS

#### Imager Type:

- 320 x 240 VOx uncooled LWIR sensor
- 19mm focal length - 36° HFOV x 27° VFOV
- Visible range 985' (300m), 3-4 times that of headlights
- Hermetically sealed against airborne particulate
- Less than one second to image on start-up
- Automatic image optimization (AGC)
- Built-in heater

**Imager and Monitor Housings:** Marine-grade aluminum imager housing, steel monitor housing. White thermoset powder coat finish and stainless steel hardware.

**Stabilization:** Multi-plane, free-floating diaphragms isolate imager from shock and vibration.

**Imager and Monitor Mounting:** Steel mounting bracket with white thermoset powder coat finish on shock mount base.

**Lens:** Replaceable germanium lens.

**Imager Operating Environments:** Rated IP66 dust tight, -40°F to +176°F (-40°C to +80°C).

**Monitor Operating Environments:** Rated IP65 dust tight, absorbs shock up to 50g.

**Screen:** Daylight/sunlight viewable LCD flat panel with anti-reflective coating; 15" (38.1cm) standard, smaller sizes optional.

**Harness:** Shielded harness from camera to monitor 16' (5m).

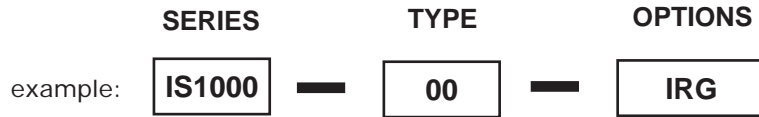
**Power:** Multi-volt AC (120-230V, 50/60Hz). Other voltages optional. Imager consumption under 2 watts, monitor under 30 watts.

**Installation:** Simple plug-to-plug; power-in, video-out.

# ORDERING INFORMATION

\*\*\* PLEASE NOTE: SOME COMBINATIONS MAY NOT BE AVAILABLE. CONTACT FACTORY WITH QUESTIONS.

## IS1000 Model Numbers



### TYPE

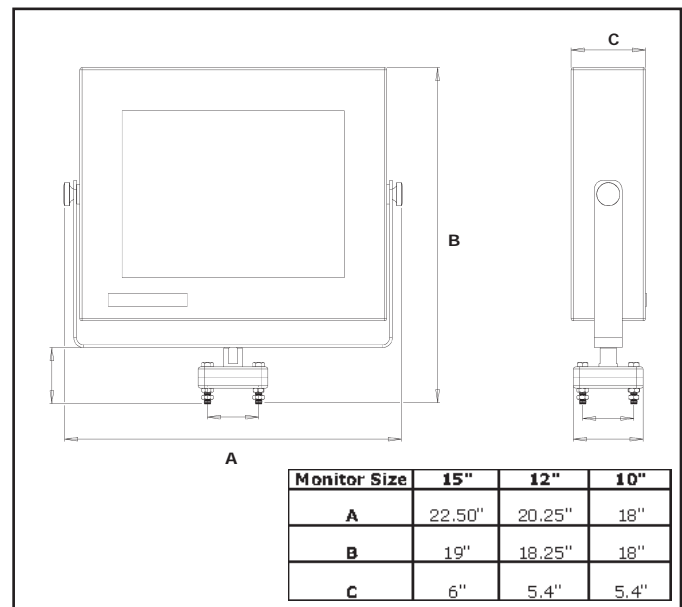
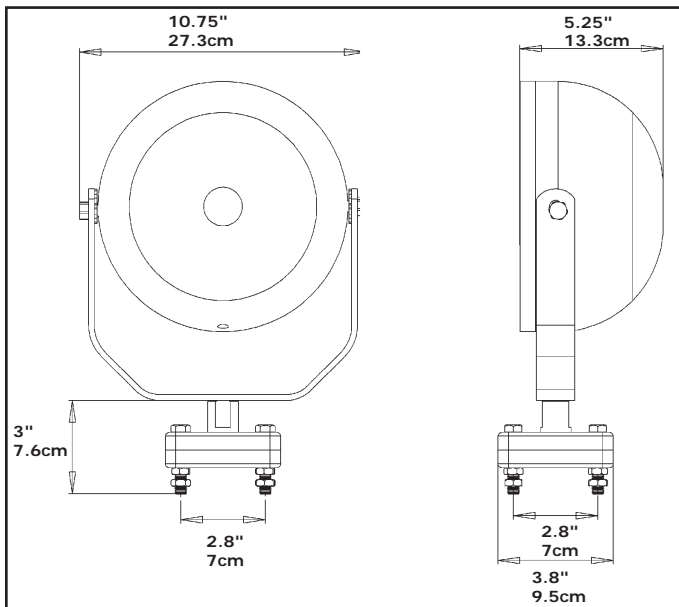
00 = NTSC video output, 30 HZ frame rate  
 00S = NTSC video output, 7.5 HZ frame rate

### OPTIONS

IRG = Imager Rock Guard  
 12V = 12 Volts  
 24V = 24 Volts  
 10MN = 10.4" Monitor  
 12MN = 12.1" Monitor  
 NOMN = No Monitor

Additional options are available. Systems may be further customized for optimal performance in unique applications. Contact Phoenix Products Company for details.

This equipment may require U.S. Government authorization for export purposes. Diversion contrary to U.S. law is prohibited. Specifications are subject to change without notice.



### Weight

Imager Housing: 15 lbs. (6.8 kg)  
 Monitor Housing (15" screen): 17.3 lbs. (7.8 kg)  
 (10" screen): 17.0 lbs. (7.7 kg)

\*Subject to change without notice.