

**REVISED
SPECIFICATIONS
LONG-WAVE INFRARED IMAGING RADIOMETER
CAMERA SYSTEM**

1. Section 1.0, Introduction: Change “EDIP” to “CEDIP.”
2. Revise Section 2.0, Item J, to read: “The sensor shall be capable of accepting and implementing dynamic, user-defined input for sub-array windowing from a specification to an optional feature.”
3. Revise Section 2.0, Item K, to read: “The imaging system shall have a calibration and measurement temperature range of -100°C to 1500°C. The Contractor shall provide, at no additional cost, spectral response data from industry-standard procedures and temperature range(s) of calibration and measurement.”
4. Revise Section 2.0, Item P, to read: “The imaging system shall have the ability to interchange lenses and shall be delivered with a standard optics kit that includes a lens, which provides a horizontal field of view (FOV) as close as possible to 23°. The lens shall have motorized focus for remote operation and a minimum focus distance not greater than 1.8 meters.”
5. Revise Section 2.0, Item Q, to read: “The imaging system shall have the ability to add, remove, and/or replace sub-band filters via a three-position minimum optical filter wheel. The filter optical wheel shall be capable of being removed and re-installed by NRL personnel without the use of specialized OEM tools and facilities. The optical filter wheel shall be capable of holding one-inch diameter sub-band filters that can be removed and replaced by NRL personnel without the use of specialized OEM tools and facilities. The Contractor shall provide documentation on filter self-emission data and the compensation method used in camera calibration (e.g., filter cooled or filter is reflected out-of-band with view of cold shield/detector). The Contractor is not required to provide any sub-band filters but may offer them as optional items.”
6. Revise Section 2.0, Item S, to read: “The camera shall be capable of remote operation over commercially available PC communications interfaces such as RS-232 and/or RS-485. A Window-based software application shall also be available for configuring, calibrating, operating and collecting imagery/data with the camera. The Contractor shall supply an Interface Control Document on the communication link to the camera.”

7. Revise Section 2.0, Item V, to read: “The system shall be delivered complete with all the required cabling and interfaces for power, communication, control, and data including two 15-meter cables – one cable for interfacing the camera with the current NRL IR Range framegrabber, Matrox Meteor II Digital (parallel digital RS-422), and control interface (RS-232 and/or RS-485); another cable for interfacing the camera with a Vivid Engineering Camera Link translator. NRL reserves the right to obtain the two 15-meter cables from a third party. The Contractor shall provide NRL with documentation necessary for the third-party fabrication of the two 15-meter cables, which will be used to perform a checkout of the system upon its delivery. The system shall be delivered in and complete with a reusable foam-lined, watertight case of high impact-proof material. “

8. Revise Section 3.0, Options, as follows:

- “ a. 7.6 to 10.3-micron FPA response
- b. 7.6 to 11-micron FPA response
- c. Standard LWIR lenses priced individually that will span an approximate horizontal FOV (HFOV) range of 2.5 to 38 degrees.
- d. Custom LWIR lens with an HFOV between 22.8° and 25°
- e. Custom sub-band one-inch-diameter filters such as 7.6 to 11 microns, 8.0 to 10.3 microns as applicable.
- f. Standard or custom mid-wave IR lens that will provide an HFOV of 2° and weighing 10 pounds or less.
- g. Remotely-controllable optical filter wheel.
- h. Dynamic, user-defined sub-array windowing. “