



## ➤ **TM-745i / TM-765i** Monochrome Interlaced Scan CCD

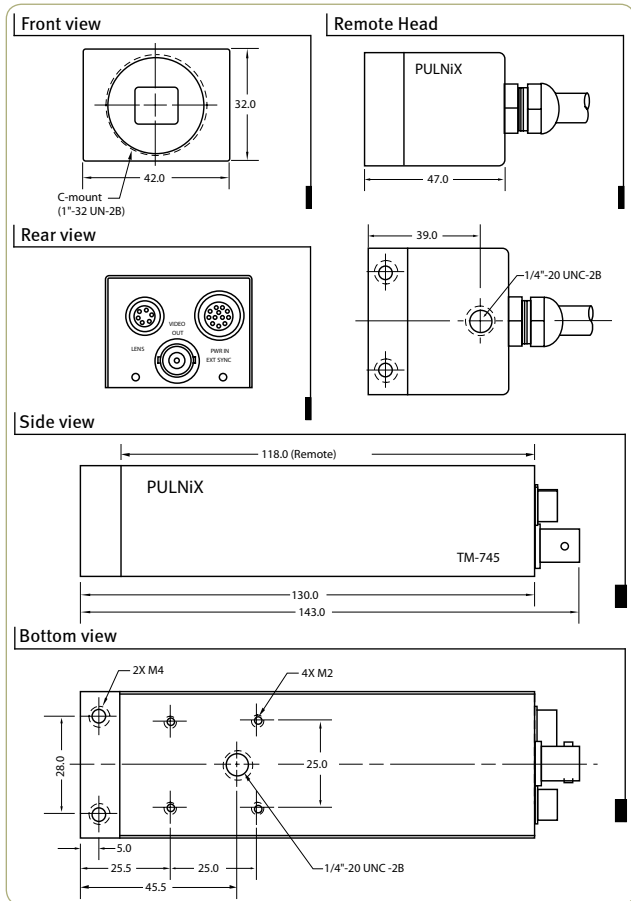


- **2/3" high resolution HAD type interline transfer CCD**
- **768 (H) x 493 (V) resolution (EIA)**
- **756 (H) x 581 (V) resolution (CCIR)**
- **Fully automatic exposure control**
- **Low light sensitivity (0.5 lux)**
- **Smearless shutter 1/60 to 1/10,000 sec.**
- **Full frame integration and asynchronous reset**
- **External sync, interlace, non-interlace auto select**
- **Excellent S/N ratio (>50 dB)**

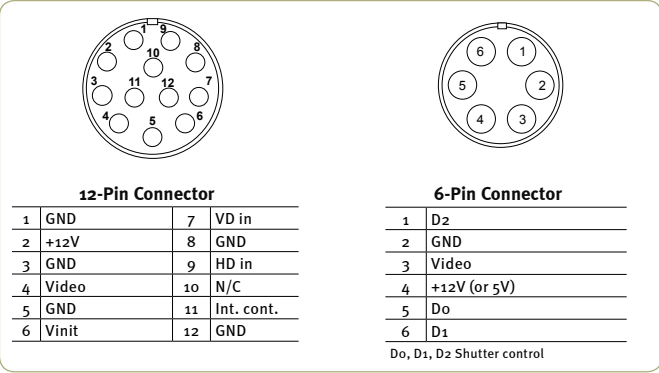
# Specifications for TM-745i/TM-765i

| Specifications         | TM-745i  | TM-765i                           |
|------------------------|--|-----------------------------------|
| Sensor                 | 2/3" interlaced scan IT CCD, HAD type<br>ICX422AL   ICX423AL   |                                   |
| Active pixels          | 768 (H) x 493 (V)  | 756 (H) x 581 (V)                 |
| Cell size              | 11 $\mu$ m x 13 $\mu$ m  | 11 $\mu$ m x 11 $\mu$ m           |
| Scanning               | 525 lines 60 Hz<br>2:1 interlaced  | 625 lines 50 Hz<br>2:1 interlaced |
| Synchronization        | Internal sync/external auto switch<br>HD/VD: 4.0 Vp-p, 4.7k $\square$<br>VD = interlaced/non-interlaced<br>HD = 15.734KHz $\pm$ 5%   HD = 15.625KHz $\pm$ 5% |                                   |
| TV resolution          | 570 x 350 TV lines   | 560 x 420 TV lines                |
| S/N ratio              | >50 dB   |                                   |
| Sensitivity            | 0.3 lux f=1.4 without IR cut filter  |                                   |
| Video output           | 1.0 Vp-p composite video, 75 $\square$   |                                   |
| AGC                    | ON/OFF (default)   |                                   |
| Gamma                  | 0.45 / 1.0 (default)   |                                   |
| Lens mount             | C-mount standard   |                                   |
| Power                  | 12V DC, 350 mA   |                                   |
| Operating temperature  | -10° C to 50° C  |                                   |
| Vibration              | 7 Grms (10 Hz to 2000 Hz) Random   |                                   |
| Shock                  | 70 G, 11 ms, half-sine   |                                   |
| Dimensions (H x W x L) | 32 mm x 42 mm x 130 mm   |                                   |
| Weight                 | 200 g  |                                   |

## Dimensions

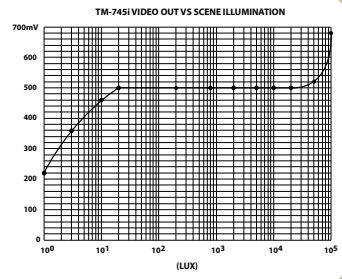


## Connector Pin-outs

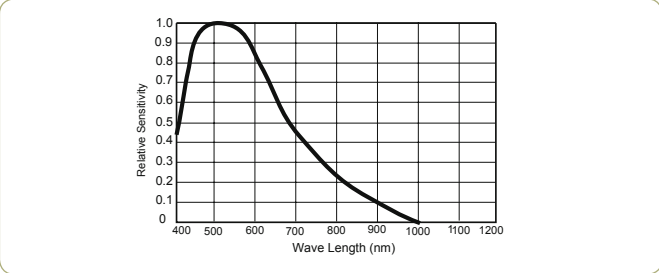


## Automatic Shutter

Automatic shuttering is controlled by a special CPU in the camera which adjusts for optimal picture level based on the video signal. This eliminates the need for costly and bulky auto iris lenses. All shuttering is activated electronically with no moving parts involved. The full shutter range from 1/60 sec. to 1/31,000 sec. is utilized.



## Spectral Response



## Ordering Information

| Camera  |                               |
|---|-------------------------------|
| Lead Processing                                   | TM-745i (EIA), TM-765i (CCIR) |
| RoHS Compliant                                    | RM-745i (EIA), RM-765i (CCIR) |
| Optional Functions                                |                               |
| AGC Disable                                       | OP1-1                         |
| Internal IR Filter Added                          | OP3-1                         |
| Optical Filter Removal                            | OP3-2                         |
| Gamma Adjust to 0.45                              | OP4-2                         |
| Pixel Clock Output                                | OP7-2                         |
| Remote Head w/1-meter cable                       | OP10-1                        |
| Sony Pinout                                       | OP25                          |
| Frame Mode Set                                    | OP60                          |
| DC-Coupled Analog Output                          | OP72                          |
| Optional Accessories (MUST BE ORDERED SEPARATELY) |                               |
| Power Cable                                       | 12P-02S                       |
| Power Supply                                      | PD-12U series                 |
| Auto Iris Connector                               | PC-6P                         |

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