TMC-7 DSP/TMC-6 DSP

Color Interlaced Scan CCD

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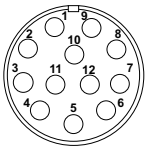
- *1/2” interline transfer CCD*
- *High performance digital signal processing (DSP)*
- *768 (H) x 494 (V) resolution (NTSC)*
- *752 (H) x 582 (V) resolution (PAL)*
- *High sensitivity complementary color filter*
- *Y/C (S-Video) and RGB output (TMC-7DSP only)*
- *1/60 to 1/10,000 sec. programmable shutter, and auto shutter*
- *RS-232C external control for gain, white balance, and other functions*
- *External sync (HD, VD sync) capability*

Specifications for TMC-7DSP/TMC-6DSP

Specifications

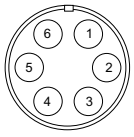
Specifications	TMC-7DSP	TMC-6DSP
Sensor	1/2" interlaced scan interline transfer CCD ICX418AKL	ICX419AKL
Active pixels	768 (H) x 494 (V)	752 (H) x 582 (V)
Cell size	8.4 µm x 9.8 µm	8.6 µm x 8.3 µm
Color filter	Cy, Ye, Mg, G complementary color filter	
Scanning	2:1 interlaced, field mode scanning	
Synchronization	Internal sync; int sync/ext auto switch with HD/VD-input	
TV resolution	460 x 400 TV lines	450 x 450 TV lines
S/N ratio	>50 dB (AGC off)	
Sensitivity	2.0 lux f=1.4 (AGC on)	
Video output VBS Y (B/W) RGB	1.0 Vp-p at 75 Ω (NTSC and PAL) 1.0 Vp-p with sync; Chroma = 285 mV at 75 Ω (Y/C or S-VHS) 714m Vp-p w/o sync, Sync 285mV at 75 Ω (TMC-7DSP)	
Color balance	Through-the-lens auto white balance; memory (std) or auto-tracking (opt) and manual hue adjustment	
AGC	Max 32 dB AGC, on-off switchable, manual gain control	
Gamma	0.45 (factory standard); 1.0 (programmable)	
Lens mount	C-mount	
Power	12V DC, 280 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 133 mm	
Weight	210 g (without tripod)	

Connector Pin-outs



12-Pin Connector

1	GND	7	Ex VD
2	+12V in	8	GND
3	GND	9	Ex HD
4	Video out (VBS)	10	R out
5	GND	11	G out
6	Sync out	12	B out

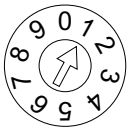


6-Pin Connector

1	RS-232 RX
2	RS-232 TX
3	N/C (+12V out option)*
4	Y (Luminance)
5	C (Chrominance)
6	GND

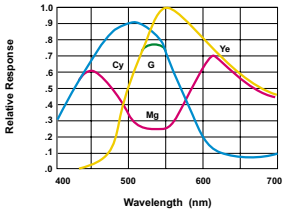
* 12VDC is optional for auto iris control

Shutter Mode Switch

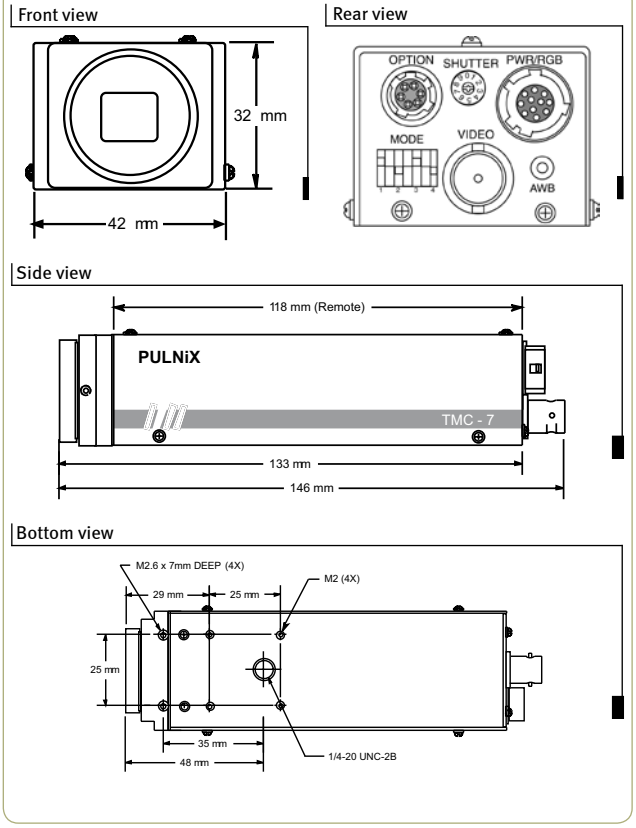


Switch Setting	TMC-7DSP (NTSC)	TMC-6DSP (PAL)
0	1/60	1/50
1	1/100	1/120
2	1/250	1/250
3	1/500	1/500
4	1/1,000	1/1,000
5	1/2,000	1/2,000
6	1/4,000	1/4,000
7	1/10,000	1/10,000
8	(not used)	
9	(not used)	

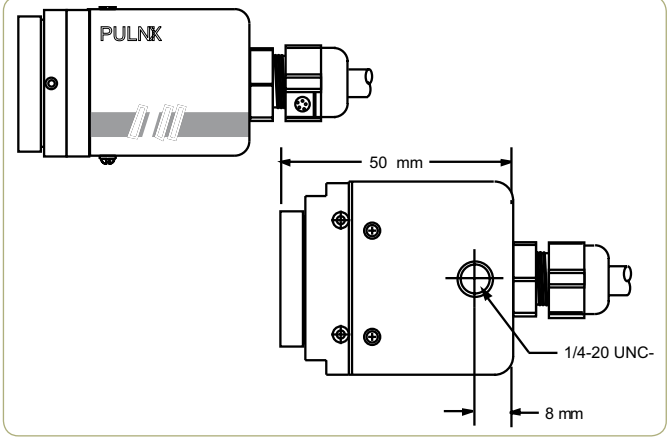
Spectral Response



Dimensions



Remote Head



Ordering Information

Camera	
Lead Processing	TMC-7DSP (NTSC), TMC-6DSP (PAL)
RoHS Compliant	RMC-7DSP (NTSC), RMC-6DSP (PAL)
Optional Accessories (MUST BE ORDERED SEPARATELY)	
Power Cable	12P-02, external sync
Power Supply	external sync 12VDC, 500mA
External Control	Manual shutter speed
RGB Cable	CBL-2R-7D (TMC-7DSP only)
RS-232 Cable	RS-232C-9

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