



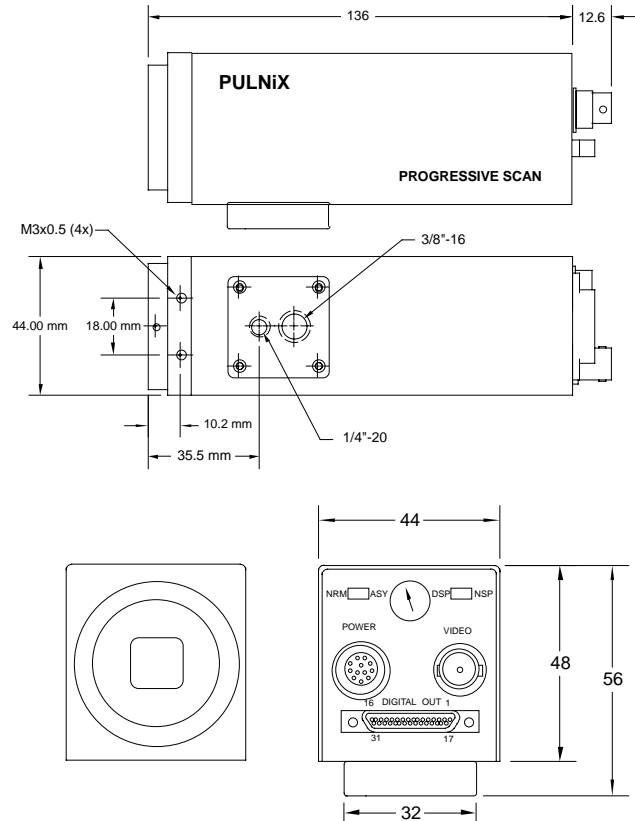
# Specifications

<b>Imager</b>	1" (9.1mm x 9.2mm) progressive scan interline transfer CCD
<b>Pixel Cell size</b>	1024 (H) x 1024 (V)
<b>Scanning Sync</b>	9.0 μm x 9.0 μm
<b>Data clock output Resolution</b>	1050 lines; 15 Hz (30 Hz display mode)
<b>S/N ratio</b>	Internal/external auto switch
<b>Min. illumination</b>	HD/VD, 4.0 Vp-p impedance 4.7KΩ VD=15 Hz ±5%, non-interlace HD=15.75kHz±5%
<b>Video output</b>	20.034 MHz (40.068 MHz for DSP)
<b>AGC</b>	Digital: 1008 (H) x 1018 (V), Analog: over 700 TV lines (H) x 800 TV lines (V)
<b>Gamma</b>	50dB min. ( AGC = off )
<b>Lens</b>	1.0 lux, f=1.4 without IR cut filter (no shutter)
<b>Power req.</b>	Sensitivity: 10μV/e-
<b>Operating temp.</b>	1.0 Vp-p composite video, 75Ω and 8-bit RS-422 output
<b>Vibration &amp; shock</b>	ON*/OFF (OFF std.) *AGC is applicable on analog output only
<b>Size (W x H x L)</b>	0.45 or 1.0 (1.0 std.)
<b>Weight</b>	C-mount (use 1" format lenses) Adjustable Back Focus
<b>Power cable</b>	12V DC, 500 mA
<b>Power supply</b>	-10°C to 50°C*
<b>Auto iris connector</b>	Random Vibration: 7G (200 Hz to 2000 Hz) Shock: 70G
<b>Functional options</b>	44mm x 48mm x 136mm (1.73" x 1.91" x 5.35")
<b>I/O</b>	330 grams (11.6 oz)
	12P-02
	PD-12P (includes power connector)
	None
	See price list for current listings.
	MP-211-031-113-4300 31-pin mating connector; 30DG-02, or 30DG-02K interface cable

Note: The TM-1001 is provided with a 30DG-02 interface cable and PD-12P power supply/power cable as standard.

\* Image quality will degrade with increasing temperature.

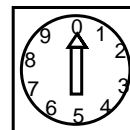
# Dimensions (mm)



### Shutter Control Switch

	Manual	Async
0	no shutter	no shutter
1	1/60	1/16,000
2	1/125	1/8,000
3	1/250	1/4,000
4	1/500	1/2,000
5	1/1,000	1/1,000
6	1/2,000	1/500
7	1/4,000	1/250
8	1/8,000	1/125
9	1/16,000	Ext. pulse width

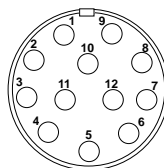
### SH CONTROL



# Pin Configuration

### 31-Pin connector (MP211-031-113-4300)

Pin#	Description	I/O	Pin#	Description	I/O
1	CLK+	Out	17	CLK-	Out
2	LDV+	Out	18	LDV-	Out
3	FDV+	Out	19	FDV-	Out
4	GND		20	VINIT	In
5	EXT HD	In	21	EXT VD	In
6	INTEG	In	22	ENINT	In
7	LPULSE	Out	23	GND	
8	D0+	Out	24	D0-	Out
9	D1+	Out	25	D1-	Out
10	D2+	Out	26	D2-	Out
11	D3+	Out	27	D3-	Out
12	D4+	Out	28	D4-	Out
13	D5+	Out	29	D5-	Out
14	D6+	Out	30	D6-	Out
15	D7+	Out	31	D7-	Out
16	GND				



### 12-Pin Connector

1	GND	7	VD in
2	+12V	8	GND
3	GND	9	HD in
4	Video	10	GND
5	GND	11	Int. cont
6	VINIT	12	GND

Note: CLK: data clock, LDV: Line data valid, FDV: Frame data valid, ENINT: Integration enable, LPULSE: Last pulse

**In Japan**  
Takenaka System Co. Ltd.  
7-1, Shinomiya Narano Cho  
Yamashina-ku, Kyoto, 607  
Tel: 075-593-9787  
Fax: 075-593-9790

**In Australia**  
PULNiX America Inc.  
Unit 16, #35 Garden Road  
Clayton, Vic 3168  
Tel: 3-9546-0222  
Fax: 3-9562-4892

**In the U.K.**  
PULNiX Europe Ltd.  
Aviary Court, Wade Road  
Basingstoke, Hants RG24 8PE  
Tel: 01256-475555  
Fax: 01256-466268

**In Germany**  
PULNiX Europe Ltd.  
Steinbruch 5  
63755 Alzenau  
Tel: 06023-9625-0  
Fax: 06023-4667



**Industrial Products Division**  
PULNiX America Inc. Tel: 408-747-0300  
1330 Orleans Drive Tel: 800-445-5444  
Sunnyvale, CA 94089 Fax: 408-747-0660  
Email: [imaging@pulnix.com](mailto:imaging@pulnix.com)  
[www.pulnix.com](http://www.pulnix.com)