



pictor® Intelligent Cameras – M48E Measure

SPECIFICATION		
SERIES	CAMERA TYPE	M48E Measure
Performance	Processor	TI-DSP 400 MHz
Memory	Firmware / Jobstorage	3 MB Flash
Camera	Sensor type	CCD-area scan / monochrome
	Resolution	640 x 480
	Sensor size	1 / 3"
	Acquisition rate (fps)	32
Display	VGA port	<input type="checkbox"/>
	PC (via vcwin®)	<input checked="" type="checkbox"/>
Input / Output	Trigger / Number of high speed outputs	1 / 1 – TTL
	Digital Input / Output	4 / 4 24 VDC – PLC
Communication	Ethernet	<input checked="" type="checkbox"/>
	RS232	<input checked="" type="checkbox"/>
Lighting	Integrated illumination	optional
Application	Control pad / VGA monitor	<input type="checkbox"/>
Development	vcwin® / PC	<input checked="" type="checkbox"/>
Lens interface	C- / CS-Mount	C-Mount
Image processing tools	Pattern search	<input type="checkbox"/>
	Contour analysis	<input checked="" type="checkbox"/>
	Measuring	<input checked="" type="checkbox"/>
	2D code reading	<input type="checkbox"/>
	Area	<input type="checkbox"/>
	Test brightness	<input type="checkbox"/>
	Graphical user interface	<input checked="" type="checkbox"/>
	Edge	<input checked="" type="checkbox"/>
	Blob	<input checked="" type="checkbox"/>
	Time processing	<input checked="" type="checkbox"/>
	Image preprocessing	<input type="checkbox"/>
	Identification	<input type="checkbox"/>
	OCV / OCR	<input type="checkbox"/>
	Colour processing	<input type="checkbox"/>
Data storage, statistics	<input checked="" type="checkbox"/>	
Power consumption	Voltage	12 ... 24 VDC
	Maximum current (not including I / O's)	130 mA
Operating temperature	Camera	0 ... 55 °C
Dimensions	Camera (not including connectors, cables)	91 x 50 x 45 mm ³
Certifications	CE	<input checked="" type="checkbox"/>

■ available

not available

pictor® Intelligent Cameras – Basic

SPECIFICATION		BASIC PERFORMANCE					
SERIES	CAMERA TYPE	M48E	M48EC	M58E	M58EC	M41EL <small>on request</small>	
Performance	Processor	TI-DSP 400 MHz					
Memory	Firmware / Jobstorage	3 MB Flash					
Camera	Sensor type	CCD-area scan / monochrome				CCD-line scan / monochrome	
	Resolution	640 x 480		1024 x 768		2048 x 1	
	Sensor size	1 / 3"		1 / 3"		14.336 mm	
	Acquisition rate (fps)	32		16		11.000 lines/s	
Display	VGA port	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
	PC (via vcwin®)	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Input / Output	Trigger / Number of high speed outputs	1 / 1 – TTL		1 / 1 – TTL		1 / 1 – TTL	
	Digital Input / Output	4 / 4 24 VDC – PLC		4 / 4 24 VDC – PLC		4 / 4 24 VDC – PLC	
Communication	Ethernet	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	RS232	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Lighting	Integrated illumination	optional		optional		optional	
Application	Control pad / VGA monitor	<input checked="" type="checkbox"/> / <input type="checkbox"/>		<input checked="" type="checkbox"/> / <input type="checkbox"/>		<input checked="" type="checkbox"/> / <input type="checkbox"/>	
Development	vcwin® / PC	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Lens interface	C- / CS-Mount	C-Mount		C-Mount		C-Mount	
Image processing tools	Pattern search	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Contour analysis	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Measuring	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	2D code reading	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Area	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Test brightness	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Graphical user interface	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Edge	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Blob	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Time processing	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Image preprocessing	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Identification	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	OCV / OCR	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
	Colour processing	<input type="checkbox"/>	<input checked="" type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	Data storage, statistics	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Power consumption	Voltage	12 ... 24 VDC		12 ... 24 VDC		12 ... 24 VDC	
	Maximum current (not including I / O's)	130 mA		130 mA		130 mA	
Operating temperature	Camera	0 ... 55 °C		0 ... 55 °C		0 ... 45 °C	
Dimensions	Camera (not including connectors, cables)	91 x 50 x 45 mm ³		91 x 50 x 45 mm ³		91 x 50 x 45 mm ³	
Certifications	CE	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	

■ available □ not available



pictor® Intelligent Cameras – Standard / High

SPECIFICATION		STANDARD PERFORMANCE		HIGH PERFORMANCE		
SERIES	CAMERA TYPE	M1606E	M1617E	M1856E	M1817E	M1821E
Performance	Processor	TI-DSP 400 MHz		TI-DSP 1 GHz		
Memory	Firmware / Jobstorage	128 MB SD Card		512 MB SD Card		
Camera	Sensor type	CCD-area scan / monochrome				
	Resolution	640 x 480	1024 x 768	640 x 480	1024 x 768	1600 x 1200
	Sensor size	1 / 3"		1 / 3"		1 / 1.8"
	Acquisition rate (fps)	63	20	242	20	10
Display	VGA port	■		■		■
	PC (via vcwin®)	■		■		■
Input / Output	Trigger / Number of high speed outputs	1 / 1 – TTL		1 / 1 – TTL		1 / 1 – TTL
	Digital Input / Output	4 / 4 24 VDC – PLC		4 / 4 24 VDC – PLC		4 / 4 24 VDC – PLC
Communication	Ethernet	■		■		■
	RS232	■		■		■
Lighting	Integrated illumination	optional		optional		optional
Application	Control pad / VGA monitor	■ / ■		■ / ■		■ / ■
Development	vcwin® / PC	■		■		■
Lens interface	C- / CS-Mount	C-Mount		C-Mount		C-Mount
Image processing tools	Pattern search	■		■		■
	Contour analysis	■		■		■
	Measuring	■		■		■
	2D code reading	■		■		■
	Area	■		■		■
	Test brightness	■		■		■
	Graphical user interface	■		■		■
	Edge	■		■		■
	Blob	■		■		■
	Time processing	■		■		■
	Image preprocessing	■		■		■
	Identification	■		■		■
	OCV / OCR	■		■		■
	Colour processing	□		□		□
Data storage, statistics	■		■		■	
Power consumption	Voltage	24 VDC		24 VDC		24 VDC
	Maximum current (not including I / O's)	210 mA		230 mA		230 mA
Operating temperature	Camera	0 ... 45°C		0 ... 45°C		0 ... 45°C
Dimensions	Camera (not including connectors, cables)	111 x 50 x 45 mm ³		111 x 80 x 45 mm ³	111 x 50 x 45 mm ³	111 x 80 x 45 mm ³
Certifications	CE	■		■		■

■ available

□ not available