

Laser Marker specifications

	Item	MX-Z2000H	MX-Z2050H	MX-Z2055H ^{*1}
Processing laser	Type	Fiber laser wavelength : 1,062nm		
	Laser class	IEC 60825 class 4, FDA (CDRH) part 1040.10 class IV		
	Average output	20W (Fiber laser transmitter output)		
	Laser output mode	Standard mode/EE mode ^{*2}		
	Repetition frequency	Standard mode 10 to 1,000kHz in 0.1-kHz steps/EE mode ^{*2} 10 to 100kHz in 0.1-kHz steps		
	Pulse-train width(pattern) setting	Standard mode 7.5ns~300ns (15patterns) /EE mode ^{*2} 150ns~450ns (3 patterns)		
Guide laser and focus pointer	Type	Semiconductor laser wavelength: 655nm		
	Laser class	IEC 60825 class 2, FDA (CDRH) part 1040.10 class II		
Optical specifications	Marking area	90x90mm	160x160mm	160x160mm
	Working distance	170±10mm	220±10mm	220±10mm
Scanning specifications	Scan speed	1~12,000mm/s		
	Marking resolution	2μm	4μm	4μm
Detail of marking	Text	original / original2 / OCR-A / OCR-B / SEMI / LM font / True Type font		
	Bar code	CODE39 / NW-7 / ITF / CODE128 / JAN		
	2D code	GS1 Databar Omni-directional / GS1 Databar truncated/GS1 Databar limited / GS1 Databar expanded		
	shape	QR code / Micro QR code / DataMatrix(ECC200)/ GS1 DataMatrix(ECC200)		
	3D shapes	Fixed point / straight line / rectangle / circle /arc		
	Image and CAD importing	Slope / step / cylinder / truncated cone / sphere		
Settings	No. of data/blocks	BMP/JPG/PNG/DXF		
	Text setting	Marking data :10,000; blocks : 2,048		
Cables	Fiber cable	0.1mm~120mm		
	Marker head control cable	4.5m minimum bending radius: 100mm		
External interface	Marker head power supply cable	5m minimum bending radius: 100mm		
	Terminal block and I/O connector	Terminal block input 20pins(NPN/PNP compatible); terminal block 14pins(NPN/PNP compatible)		
	I/O connector	37pins(NPN/PNP compatible), interlock terminal I/O : 8pins		
	Serial communications	RS-232C/RS-422A		
	Ethernet communication	Ethernet(1000BASE-T/100BASE-TX/10BASE-T) / Ethernet/IP™		
	Power supply voltage	100 to 120VAC,50/60Hz; 200 to 240VAC,50/60Hz		
	Over voltage category	CAT II		
	Power consumption	at 100VAC: maximum 390VA, at 200VAC : maximum 420VA		
	Operating ambient temperature, humidity	0 to 40°C, 35 to 85%RH (no condensation)		
Ambient conditions	Storage ambient temperature ^{*,} humidity	-10 to 60°C (no freezing) / 35 to 85% RH (no condensation)		
	Installation environment	Indoor, 3,000m, max		
	Certifications	cULus Listed (File No. E200593), CB SG-MS-00316A1		
	Applicable standards	UL 61010-1 (3rd Ed.), CAN/CSA-C22.2 No. 61010-1-12 (3rd Ed.), IEC 61010-1 (Ed. 3) IEC 60825-1, FDA (CDRH) part 1040.10, EN 61010-1:2010, EN 60825-1:2014		
	Pollution degree	2		
	Protection structure (head) ^{††}	IP65 (per IEC 60529 standard)		
	Cooling method	Forced air cooling		
	Weight	Marker head approx.15kg, controller approx. 25kg		
	Size	Marker head W140 × H230 × D415mm (excluding projections), controller W225 × H430 × D390mm (excluding projections)		
	Installation direction	Marker head all directions of up, down, left and right (intake vent on the left side face must not be blocked.) Controller must be installed vertically.		
	USB interface [‡]	USB memory : Controller front panel, Type A connector, keyboard/mouse: controller back panel, Type A connector		
	Accessories	Marker head control cable, marker head power supply cable, system key , removable terminals (input and output,1 each), setup manual, CD-ROM (offline editing software [§] , User's manual in PDF), Interlock release connector		
	Terminal opener, cable tie			

*1 Large beam diameter for coarse marking

*2 EE mode : Energy Enhanced mode (optional)

*3 The operating temperature may be limited due to their processing conditions. When using the laser continuously or close to continuously for laser processing,etc., please contact Omron in advance.

*4 The head of this product is constructed for environmental protection under the conditions specified in IEC 60529 (JIS C0920), and is not guaranteed under any other conditions.

*5 Do not use the USB interfaces for anything other than their specified applications.

*6 The following environment is required for use of the offline editing software and font logo editor

: Computer with a USB 2.0 or 1.1 port , Microsoft Windows® 8/Windows® 7 , Available hard disk space: 1GB, min. Display resolution: 1,024×768, min.

