

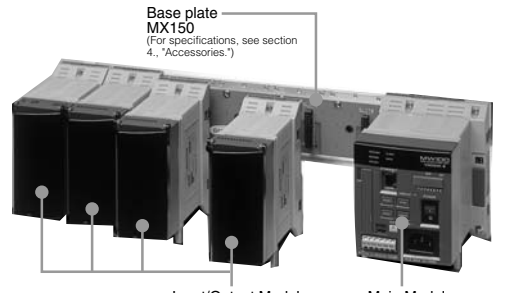
MX100/MW100 Specifications

1. Main Unit Specifications

MX100 and MW100 Hardware Specifications

		MX100	MW100	
Logging type		Mainly PC measurement	Mainly standalone measurement and distributed remote measurement	
Maximum number of connectable channels (per unit)		60		
Maximum number of connectable modules (per unit)		6		
Total maximum number of connectable channels		1200 (20 units × 6 modules)	360 (6 units × 6 modules)	
Display monitor system		Through PC software or API	Through a Web browser	
Environmental worthiness (operating temperature range1)		0 to 50°C	-20 to 60°C (or -20 to 50°C when using the MX120 or MX125 output modules)	
Data save method	Save operation	Save on the PC (can be saved to CF card with the /DS option)	Save to CF card	
	Save start/stop	Executed on the PC.	Executed using the START/STOP panel key, communication commands, or web browsers.	
	Supported external media	CF card (up to 2 GB supported), Type I × 1 slot (The MX100 supports Type II)		
Measurement interval	Basic measurement interval	10, 50, 100, 200, 500 ms, 1, 2, 5, 10, 20, 30, 60 sec. However, the measurement interval that can be set differs from module to module. For the measurement interval and number of measurable channels, see 4, "Acquisition Speed & Save Time."		
	Multi-interval	Up to 3 measurement groups/measurement intervals can be set		
Display	Display type	2×7-segment display		
	Other	—	Measurement, alarm, recording, computation, and communication status indicators	
Alarms (alarm functions)	Main unit alarm types	Upper limit, lower limit, differential upper limit, and differential lower limit	Upper limit, lower limit, differential upper limit, and differential lower limit, high limit on rate-of-change, low limit on rate of change	
	Number of alarms	2 levels per channel	4 levels per channel	
	Number of relay outputs	1 to 60 points depending on the number of mounted DO modules		
Communication specifications	Standard interfaces	100Base-TX/10Base-T (auto detect), Ethernet		
	FTP server/client function	—	Y	
	E-mail function (client)	—	Y	
	DHCP/DNS function (client)	—	Y	
	SNTP function (server/client)	—	Y	
	HTTP function (server)	—	Y	
	ModbusTCP function	—	Y (as client, requires /M1)	
	ModbusRTU function	—	Options (as Master, requires /M1)	
	Supported OS, browsers	—	Windows 2000/XP, Internet Explorer 5.5 and 6.0	
	RS-232-C	—	Options	
MATH functions	RS-422-A/485	—	Options	
	Availability	Comes standard (execute using PC software)	Optional (function added to main unit)	
	Number of channels for computation	60 (Can also be set for communication input on the MW)		
	Number of channels for communication input	—	240	
Computations	Basic MATH functions, relational operations, logical operations, arithmetic operations, TLOG computation, and conditional expressions		Basic MATH functions, relational operations, logical operations, arithmetic operations, TLOG computation, CLOG computation, and conditional expressions	
	MATH interval	100 ms or more (can be assigned)		
Normal operating conditions	Rated power supply voltage	AC power	100 to 240 VAC	
		DC power	—	
	Power supply voltage	AC power	90 to 250 VAC	
		DC power	10 to 32 VDC	
	Power supply frequency	50 Hz ± 2%, 60 Hz ± 2%		
	Power consumption	AC power	Up to approximately 70 VA (when 6 modules)	
		DC power	—	
	Withstand voltage	AC power	1500 VAC (50/60 Hz) the power supply terminal and earth terminal	
		DC power	1000 VAC (50/60 Hz) the power supply terminal and earth terminal	
	Insulation resistance	Power supply terminals and ground, 20 MΩ or more (500 VDC)		
Supported standards	CSA, UL (CSANRTL/C), CE, C-Tick			
Structure	External dimensions (mm)	92 (W) × 131 (H) × 163 (D)	105 (W) × 131 (H) × 163 (D)	
	Weight	Approximately 4.1 kg (when 6 modules)	Approximately 4.3 kg (when 6 modules)	
Other specifications	Main unit power consumption	Approximately 8 W		
	Clock accuracy	± 100 ppm		
Application software	Included software	Name	MX100 Standard Software	
		OS	Windows NT 4.0, 2000, XP (recommended)	
		Name	MW100 Viewer Software	
		OS	Windows 2000, XP (recommended)	

Standard Configuration (MX and MW)



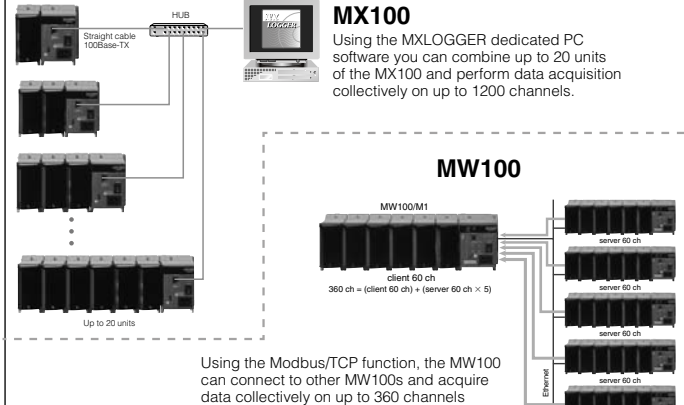
Base plate MX150
(For specifications, see section 4, "Accessories.")

Input/Output Modules
(For specifications, see section 2, "Input/Output Module Specifications.")

Main Module MX100/MW100
(For specifications, see section 1, "Main Unit Specifications.")

The MX can be configured for your specific measurement needs by combining the main module, input/output modules, and a base plate. Assembled units can be used as-is on the desktop, or can be rack- or panel-mounted with provided DIN rails (DIN rail mounting brackets come standard with the MX150).

Multi-Channel Measurement



MX100
Using the MXLOGGER dedicated PC software you can combine up to 20 units of the MX100 and perform data acquisition collectively on up to 1200 channels.

MW100
MW100/M1
360 ch = (client 60 ch) + (server 60 ch × 5)

Using the Modbus/TCP function, the MW100 can connect to other MW100s and acquire data collectively on up to 360 channels (requires the /M1 option on the client side).

5. Models and External Dimensions

Main Unit

MX100

Model	Suffix Code	Description
MX100		Main module
Software language	-E	English (with MX100 standard software)
Supply voltage	-1	100 VAC-240 VAC
Power supply inlet and power supply cord	D	3-pin power inlet with UL/CSA cable
	F	3-pin power inlet with VDE cable
	R	3-pin power inlet with SAA cable
	Q	3-pin power inlet with BS cable
	H	3-pin power inlet with CCC cable
	W	Screw terminal (power supply cord is not attached)
Options	/DS	Dual save function

MW100

Model	Suffix Code	Added Specifications Code	Description
MW100			Main module *1,2
Language	-E		English (comes with MW100 Viewer Software)
Supply voltage	-1		100 VAC-240 VAC
	-2		12 to 28 VDC, with AC adapter *3
	-3		12 to 28 VDC, without AC adapter *4
Power input type and power supply cord	D		AC power: 3-pin power inlet with UL/CSA cable DC power: Screw terminal, UL/CSA cable for AC adapter
	F		AC power: 3-pin power inlet with VDE cable DC power: Screw terminal, VDE cable for AC adapter
	R		AC power: 3-pin power inlet with SAA cable DC power: Screw terminal, SAA cable for AC adapter
	Q		AC power: 3-pin power inlet with BS cable DC power: Screw terminal, BS cable for AC adapter
	H		AC power: 3-pin power inlet with GB (CCC) cable DC power: Screw terminal, GB (CCC) cable for AC adapter
	W		Screw terminal (does not come with a power supply cord) *3,4
	Options	/C2	RS-232 communication interface *5,6
	/C3	RS-422-A/485 communication interface *5,6	
	/M1	MATH functions *6,7	

- *1 CF (compact flash) card not included.
- *2 Modbus/TCP function comes standard.
- *3 "W" cannot be selected with "-2".
- *4 With "-3, only W (screw terminal) can be selected.
- *5 /C2 and /C3 cannot be selected together.
- *6 /C2 or /C3 must be selected when using the Modbus/RTU slave function. Also, "/M1" must be selected for use of the Modbus/RTU master function.
- *7 /M1 must be selected when using the Modbus/TCP client function.

Input/Output Modules

Model	Suffix Code	Added Specifications Code	Description
MX110			Analog Input Modules
Input type	-UNV		DCV/TC/DI/3-wire RTD*1
	-V4R		DCV/DI/4-wire RTD/Ω*1
Measurement interval and number of channels	-H04		4-CH, high-speed (shortest measurement interval: 10 ms)
	-M06		6-CH, medium-speed (shortest measurement interval: 100 ms) *1
	-M10		10-CH, medium-speed (shortest measurement interval: 100 ms) *2
Options	/NC		No plate with clamp terminals*2

- *1 -M06 must be selected if -V4R is selected. Also, the -M06 specification when selecting -UNV cannot be made.
- *2 With NC, only -M10 can be selected.

Model	Suffix Code	Description
MX112		Strain Input Module
Input type	-B12	Internal bridge resistance: 120 Ω
	-B35	Internal bridge resistance: 350 Ω
	-NDI	NDIS connector for connection to external bridge head and strain gauge type converters
Measurement interval and number of channels	-M04	4-CH, medium-speed (shortest measurement interval: 100 ms)

Model	Suffix Code	Added Specification Code	Description
MX115			Digital Input Module
Input type	-D05		Non-voltage contact, level (5 V logic), and open collector
	-D24		24 V logic
Measurement interval and number of channels	-H10		10-CH, high-speed (shortest measurement interval: 10 ms)
Options	/NC		No plate with clamp terminals

Model	Suffix Code	Description
MX120		Analog output module
Output type	-VAO	Allows voltage/current output and mixed voltage/current output
	-PWM	Pulse width modulation output
Output update interval and number of channels	-M08	8-CH, output update interval: 100 ms

Model	Suffix Code	Description
MX125		Digital output module
Output type	-MKC	A contact
Output update interval and number of channels	-M10	10-CH, output update interval: 100 ms

Model	Suffix Code	Description
MX150		Base plate
Base type	-1	1 main module, for connecting 1 input/output module
	-2	1 main module, for connecting 2 input/output modules
	-3	1 main module, for connecting 3 input/output modules
	-4	1 main module, for connecting 4 input/output modules
	-5	1 main module, for connecting 5 input/output modules
	-6	1 main module, for connecting 6 input/output modules

Accessories

Model	Suffix Code	Description
772061		10 ch screw (M4) terminal block (RJC included) *1
772062		Cable between input module and screw terminal blocks *2
Cable length	-50	50 cm cable
	-100	100 cm cable
772063		Plate with clamp terminals (RJC included) *3
772064		Clamp terminal *4

- *1 772061 is only compatible with the MX110-UNV-M10 (10-CH, Medium Speed Universal Input Module), MX115-D05-H10 (10-CH High-Speed 5 V DI Module), and MX115-D24-H10 (10-CH High-Speed 24 V DI Module).
- *2 772062 is only compatible between the MX110-UNV-M10 (10-CH, Medium Speed Universal Input Module) and screw terminal block (772061), MX115-D05-H10 (10-CH High-Speed 5 V DI Module) and screw terminal block (772061), and MX115-D24-H10 (10-CH High-Speed 24 V DI Module) and screw terminal block (772061).
- *3 772063 is only compatible with the MX110-UNV-M10 (10-CH, Medium Speed Universal Input Module), MX115-D05-H10 (10-CH High-Speed 5 V DI Module), and MX115-D24-H10 (10-CH High-Speed 24 V DI Module).
- *4 772064 is only compatible with the MX110-UNV-H04 (4-CH High-Speed Universal Input Module).

Accessories

Model	Description
772065	Clamp terminal *5
772066	Connector cover for base plate
772067	Plate with clamp terminals *6
772068	Plate with clamp terminals (built-in bridge, 120 Ω) *7
772069	Plate with clamp terminals (built-in bridge, 350 Ω) *8
772080	Plate with screw (M3) terminals (RJC included) *9
772081	Plate with built-in shunt resistance (10 Ω) *10
772082	Plate with built-in shunt resistance (100 Ω) *10
772083	Plate with built-in shunt resistance (250 Ω) *10

- *5 772065 is only compatible with MX120-VAO-M08 (8-CH AO module), MX120-PWM-M08 (8-CH PWM output module), and the MX120-MKC-M10 (10-CH DO module).
- *6 772067 is only compatible with the MX110-V4R-M06 (6-CH Medium-Speed 4-Wire RTD Resistance Input Module).
- *7 772068 is only compatible with MX112-B12-M04 and MX112-B35-M04 (4-CH, Medium-Speed Strain Input Module).
- *8 772069 is only compatible with MX112-B35-M04 and MX112-B12-M04 (4-CH, Medium-Speed Strain Input Module).
- *9 772080 is only compatible with MX110-UNV-M10 (10-CH, Medium Speed Universal Input Module), MX115-D05-H10 (10-CH High-Speed 5 V DI Module), and MX115-D24-H10 (10-CH High-Speed 24 V DI Module).
- *10 Includes terminal cover. Note 3 Common to b terminals (2 terminals) for RTD.
- *11 772081-772083 are only compatible with MX110-UNV-M10 (10-CH Medium-Speed Universal Input Module).

Part Name	Model	Description
Shunt resistor (for clamp terminal)	438920	250 Ω ±0.1%
	438921	100 Ω ±0.1%
	438922	10 Ω ±0.1%
Shunt resistor (for screw (M4) clamp terminals)	415920	250 Ω ±0.1%
	415921	100 Ω ±0.1%
	415922	10 Ω ±0.1%
Adapter for compact flash memory card	772090	
Compact flash memory card	772091	128 MB
	772092	256 MB
	772093	512 MB
	772094	1 GB

Application Software

MX100

Model	Description
MX180	MX100 Standard Software (for connecting to the 1 unit).
WX103	MXLOGGER (for connecting multiple unit, up to 20 units).
MX190	API for MX100 and DARWIN (group of functions for creating programs).

MW100

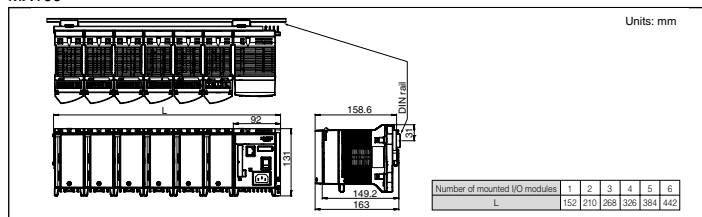
Model	Description
MW180	MX100 Viewer Software

MX100/MW100

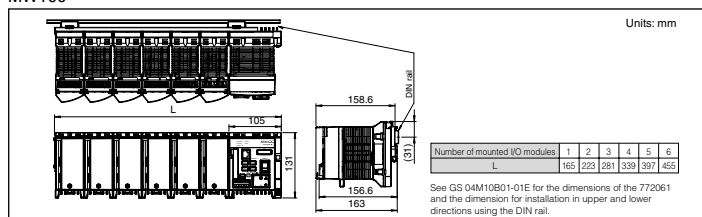
Model	Description
WX101	DAQLOGGER (for mixed connections of the MX, DARWIN, MV, DX, and μR)
WX1	Gate MX/MW (for connecting to the DAQLOGGER)

External Dimensions

MX100



MW100



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NOTICE

- Before operating the product, read the user's manual thoroughly for proper and safe operation.
- If this product is for use with a system requiring safeguards that directly involve personnel safety, please contact the Yokogawa sales offices.
- This product is not constructed to be explosion-proof.



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