# Energy Saving Data Collecting Server (EcoWebServer II) General Specifications

MODEL

MES-255R-A-CN-1 MES-255R-A-CN-2

LSPY-9011

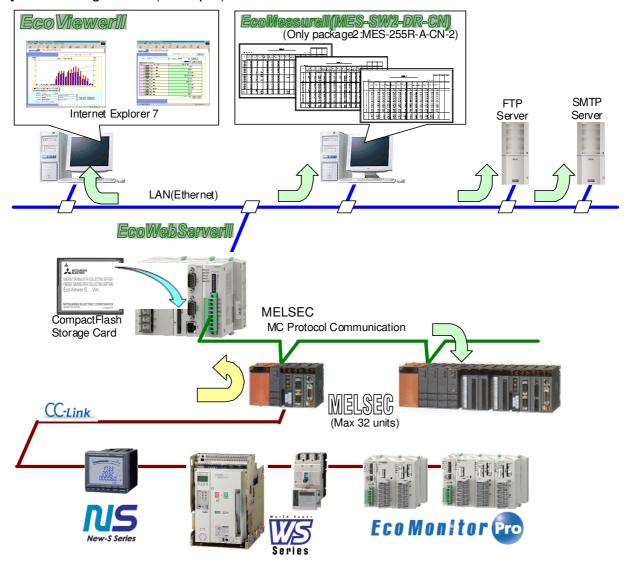
仕様書番号

SPEC.NO.

#### 1 Outline

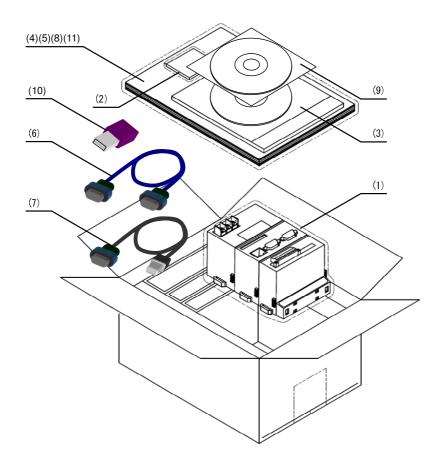
EcoWebServerII provides the function to send information and the function to display graph on the Web. Because the HTTP server function is provided, and the collected measurement data can be sent to the Internet via Ethernet, the amount of the energy used can be checked and understood. Information that EcoWebServerII sent can be inspected by EcoViewerII with the personal computer on the Internet.

#### 2 System configuration (example)



3 Confirmation of contents of package

J U 1 1 1 1 1	mation of contents of package		
	_	Package1	Package2
No.	ltem	MODEL	MODEL
		MES-255R-A-CN-1	MES-255R-A-CN-2
(1)	MES-255R-A-CN(EcoWebServerII Main Body)	•	•
(2)	CompactFlash Storage Card(EcoViewerII)	•	•
(3)	Application CD-ROM		
	MES-ST1-A-CN		
	EcoViewerII configuration software,	/iewerII configuration software,	
	and Instruction manual		
	MES-MT1-A-CN		
	Maintenance tool software	•	•
	and Instruction manual		
	EcoMeasureII		
	report generator software		•
	and Instruction manual		
	HASP Device Driver		•
(4)	MES-255R-A-CN(EcoWebServerII) Instruction manual	•	•
(5)	License agreement sheet	•	•
(6)	RS-232C cable	•	•
(7)	UC-232A : USB-to-Serial(RS-232) Converter		
	Main Body	•	•
(8)	Instruction manual	•	•
(9)	Driver and Information pac CD-ROM	•	•
(10)	HASP USB Key		•
(11)	HASP USB Key Instruction manual		•



## 4 Specifications4.1 Electronic and mechanical specifications(EcoWebServerII)

	Item	Specification	
Auxiliary pow	er supply ratings	100VAC to 110VAC (+10%, 15%) 50Hz/60Hz	
Consumed VA		11VA (at 100 V AC)	
	ectric wire and applicable	Applicable electric wire: 1.25 mm <sup>2</sup>	
crimp-type terminal (terminal block)		Applicable crimp-type terminal: Terminal 7.2 mm or less in	
		diameter for M3.5	
		(Ex.: R1.25-3.5, bare round type)	
		Terminal tightening torque: 0.8 to 1.0 N,m	
Working temp	perature range	0°C to 55°C (daily mean temperature: 35°C or less)	
Working humidity range		30% to 80%RH (no condensation)	
Storage temperature range		10°C to 60°C	
Withstand voltage at commercial frequency		Between all electric circuits and housing 1500 V AC for 1 minute	
Insulation resistance		10 MΩ or more (500 VDC) in the same places as shown above	
External Memory		CompactFlash Storage Card Type I x 1	
·		(Energy Saving Data Collectiong Software:EcoViewerII)	
Clock	Range 00:00:00 on Jan. 1, 2002 to 23:59:59 on Dec. 31, 2099		
	Accuracy	About one minute/month (at 23°C)	
	backup time	Accumulated time of power failure: Approx. 1 year (at 35°C)	
		Lithem battery of building into.	
		(It is recommended to exchange it every three years.)	
External dimensions (W×H×D) in mm		125 x 98 x 88	
Mass		0.6kg	
Installing method		Installation with IEC rail	
Option		Lithem battery, model MES-BT1-A	

### 4.2 Communication specifications(EcoWebServerII)

Communication specifications(Ecowebservern)			
Item			Specification
Communicati LAN(10BASE-T x 1)		SE-T x 1)	10Mbps
on port			UTP (Unshielded Twisted Pair), 100m
	Serial	RS-232C x 2	IP address and clock setting exclusive use.
			Transmission rate: 9600bps
			Data Format
			Start Bit: 1
			Data Bit : 8
			Parity Bit : none
			Stop Bit : 1
		RS-485/422 x 1	MELSEC MC Protocol Communication
			Maximum number of connected units is 42 units(Maximum)
			Transmission rate: 19200bps
			Data Format
			Start Bit : 1
			Data Bit : 7
			Parity Bit : 1(even)
			Stop Bit : 1
			Sum Check Code having
			Wiring length: 500m

#### 4.3 Software specifications

#### 4.3.1 EcoViewerII

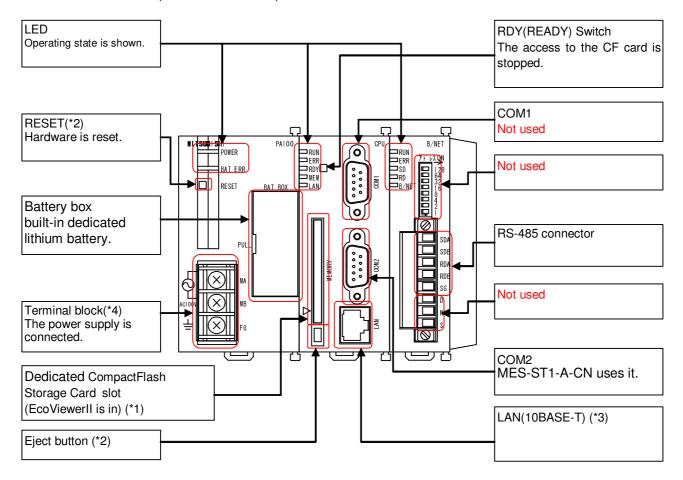
	Item	Specification	
OS		Windows XP(SP2), Windows Vista	
WebBrowser		Internet Explorer 6(SP2) or 7	
		(necessary Java applet execution environment)	
The number of the	measurement point	255 point	
(from MELSEC via			
	virtual measurement Point	32 point	
	measurement point of energy	16 point	
consumption per u	•		
Display function Zoom		energy(kWh), pulse, analog	
	Day	energy(kWh), pulse, analog, virtual measurement	
		energy consumption per unit of production	
	Week	energy consumption per unit of production	
	Month	energy(kWh), pulse	
	Year	energy(kWh), pulse	
	present value	Ten measurement points can be displayed on one screen	
		in maximums.	
Calculation function		The arithmetic operation of 16 elements or less can be	
	T	done.	
Logging function	Zoom	every 5 minutes	
	Day	on the hour every hour, or the half	
	Month	once every specified time every day	
	Year	once every specified month ,day, and hour	
Storage function	Zoom	for 14 days	
Storage period	Day	for 62 days	
	Month	for 24 months	
	Year	for 3 years	
	Virtual measurement Point	for 62 days(day logging)	
		24months(month logging)	
	measurement point of	for 62 days	
	energy consumption per unit		
Monitoring function : Report by mail (The mail server is separately necessary)		upper and lower limits of measurements(max 32 point)	
		Various error information	
		Operation status of measurements(max 32 point)	
Transfer function		It automatically forwards it to the specified FTP server.	
(The FTP server is separately necessary)			
Maintenance		The plan value and the target value can be set.	

#### 4.3.2 EcoMeasureII(only package2:MES-255R-A-CN-2)

Item		Specification	
The main part of a computer		'	
The main part of a t		DOS/V machine	
CPU		Pentium ® 400MHz and more	
Memory		At least 128MB or more (256MB or more is recommended)	
	Hard disk	Software: about 100MB and data: about 890MB or more	
	Display	More than SVGA (800x600 dots) is required.	
	USB	1.1 or more Ver.	
OS		Windows XP(SP2), Windows Vista	
Spreadsheet software		Microsoft Excel 2003(SP3), 2007(SP1)	
Function of making the report files		daily report, monthly report, annual report	
	The number of items that can	daily report : 300 items (maximum)	
	be output	monthly report : 300 items (maximum)	
		annual report : 300 items (maximum)	
	Items	Analog: maximum, minimum, average	
		Pulse: total, maximum, minimum, average	
The number of EcoWebServerII		2 units	
The number of the measurement point		510 point	
The number of the virtual measurement Point		95 point	
the number of measurement point of energy		100 point	
consumption per unit of production			

#### 5 Part Names and Functions

#### 5.1 EcoWebServerII(MES-255R-A-CN)



Please always install and use Compact Flash memory card.

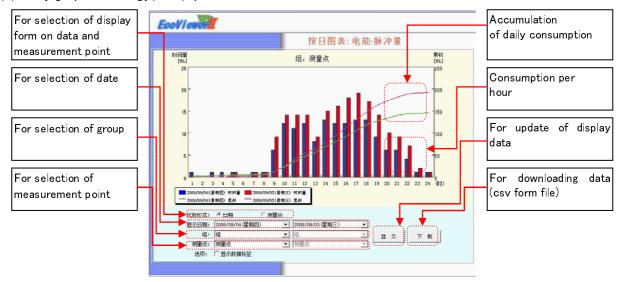
- (Note 1) The Compact Flash memory card must always be installed in the EcoWebServerII.

  The EcoWebServerII does not work properly if the Compact Flash memory card is uninstalled during electricity. Before the Compact Flash memory card are pulled out from the card slot, push the RDY switch, confirm that RDY LED is lit, and cut off the power supply to the EcoWebServerII.
- (Note 2) Do not use mechanical pencil. It causes trouble when lead is broken and invades inside. Use thin drivers.
- (Note 3) When the EcoWebServerII is connected to a HUB, use a 10BASE-T straight cable.

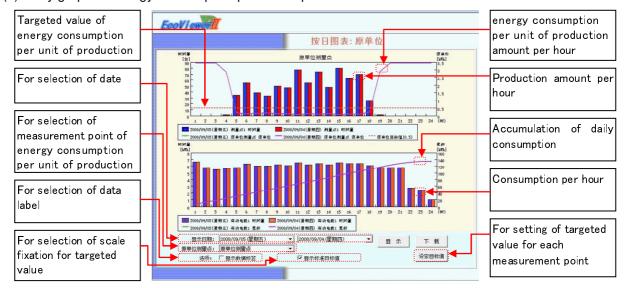
  When the EcoWebServerII is connected to a PC (1 to 1) directly without using HUB, use a 10BASE -T cross cable. Be aware that 10BASE-T cable generally means straight cable.
- (Note 4) Please connect 100-110VAC (+10%, -15%) 50/60Hz to the EcoWebServerII. Do not connect to any other power supply because it can be the cause of trouble.

#### 5.2 EcoViewerII Screen display example

#### (1) Daily graph : energy(kWh), pulse screen



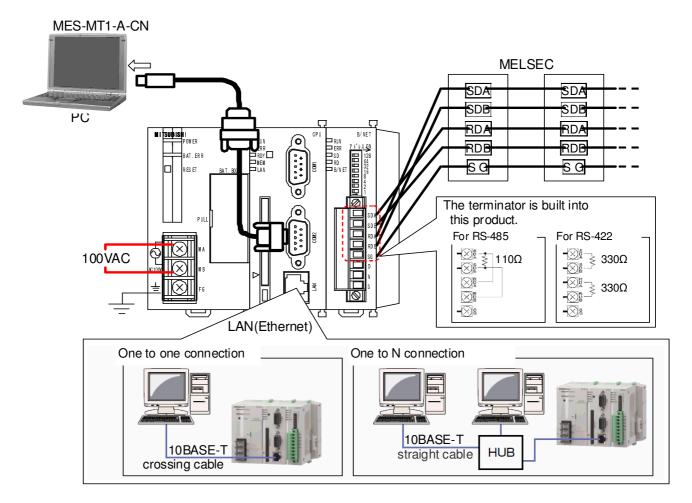
#### (2) Daily graph : energy consumption per unit of production screen



#### (3) Present value display (Group) screen

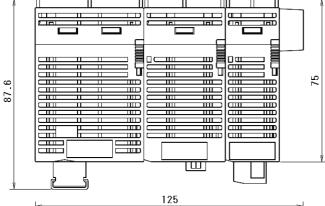


#### 6 Connection diagram

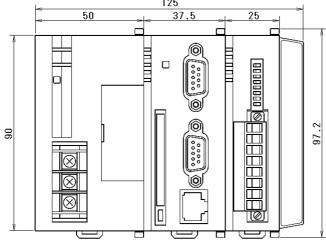


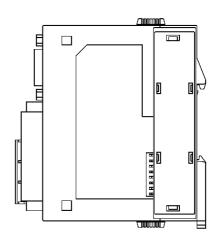
Please connect 100-110VAC (+10%, -15%) 50/60Hz to the EcoWebServerII. Do not connect to any other power supply because it can be the cause of trouble.

#### 7 External Dimensions



Unit: mm.





#### 8 Safety Precautions

#### 8.1 Working environment and working conditions

Do not use the unit in any of the following places. Doing so may cause malfunction or reduction in service life.

- · Place where the ambient temperature exceeds the working temperature range(0°C to 55°C).
- $\cdot$  Place where the humidity exceeds the humidity range (30% to 80%RH) or condensation occurs.
- · Place with much dust, corrosive gas, salt or oily smoke.
- · Place where the unit may be exposed to rain or drops of water
- $\cdot$  Place where metallic particles or inductive substances are dispersed.
- · Place where the daily mean temperature exceeds 35°C.
- · Place with much vibration or impact.
- · Place where the altitude exceeds 1000m.
- · Place exposed to direct sunlight.
- · Place with strong electromagnetic field or much foreign noise.

#### 8.2 Connection of FG terminal

- · For practical use, ground the FG terminal.
- · Do not connect the FG terminal when performing insulation resistance test or withstand voltage test.
- · A high-voltage protective element is fitted between MA and FG and between MB and FG. If high voltage is applied for withstand voltage test, the protective elements function to short-circuit MA and FG, and MB and FG.

#### 8.3 Wiring of communication line

· When the transmission signal line and input signal line are laid in parallel with a power line or a high-voltage line, keep the distance shown in the right table between them.

Condition	Distance
	30 cm or more
Other high-voltage power line	60 cm or more