Web Controller EH-WD10DR/WA23DR Palm sized All-in-One Controller

HITACHI Inspire the Next

the local sectors

- Embedded Web server
- E-mail sending function
- ASR message communication
- Self created Web pages can be stored
- Configuration via Web browser
- PLC functionality
- Various serial communication
 possibilities
- IEC 61131-3 programming
- 32 bit-RISC-processor





Web Controller EH-WD10DR/WA23DR

Palm sized All-in-One Controller

Application Examples

Security

The Web Controller provides a solution for security with a camera and a sensor. When the sensor detects trespassing into the restricted area, the Web Controller instructs a camera to capture a picture and reports to the system administrator.

Cell-Phone PDA Senso Controller

Monitoring and controlling FA equipment

Traditionally special FA networks were prepared and dedicated PC terminals for each network would be necessary, even if just a few points of data were required. By connecting the Web Controller to both a LAN and the equipment, the data can be monitored by any PC connected on that LAN.



Store automation

The Web Controller can be used as a bi-directional controlling system for stores.

Status of Point of Sales, refrigerators, etc. can be monitored and controlled remotely.

All the stores can be supervised by headquarters, and each store can be monitored by the owner remotely.



Main Features

The Web Controller is very useful both in an office and the field. Monitoring and controlling have been realized through mobile phones and PDA's. An e-mail can also be sent when an event occurs.

Web Server Function

Data on the Web Controller can be read/written using any PC on a network with an Internet browser. The Web Controller provides a web server functionality using built-in HTTPD (1) and special CGI (2).

⁽¹⁾ HTTPD: Hyper Text Transfer Protocol Daemon (2) CGI: **Common Gateway Interface**





Email Sending Function

The Web Controller can send an e-mail by using the built-in SMTP $^{\scriptscriptstyle (3)}$.

Up to 16 preconfigured e-mail messages can be automatically sent, based on independant PLC events. Each e-mail contains plain text and max. 3 process data words.

- Max. 8 destination addresses
- Subject, body, data (max. 3 words) can be configured for each condition

⁽³⁾ SMTP: Simple Mail Transfer Protocol

Automatic Data Sending / Receiving Function

Automatic data sending / receiving without user program can be realized once after communication parameters are configured.



Communication specification

- Connection numbers: Max. 6
- TCP/IP, UDP/IP
- Data send: Event /Cyclic
- Send data numbers: Max. 730 words (WR/WM)
- · Receive data numbers: Max. 730 words (WR/WM)



Network Communications Function

The I/O of the Web Controller can be read/written by any PC through the network. HMI ⁽⁴⁾/SCADA ⁽⁵⁾ systems supporting the Ethernet protocol of the Hitachi PLC can be used with the Web Controller.



The communication specification

- The number of the connections: Max. 4
- TCP/IP, UDP/IP
- (4) HMI: Human Machine Interface
- ⁽⁵⁾ SCADA: Supervisory Control And Data Acquisition

The RS-232C port of the Web Controller supports the Hitachi PLC protocol, any data in an existing Hitachi PLC can be read and written.

The Web Controller can be a gateway module to an Ethernet network for PLC's without the Ethernet Function.

This interface will be useful when ...

- existing system should not be changed.
- existing PLC doesn't have any free slot for Ethernet[™] module.
- existing PLC doesn't have any Ethernet[™] communication module.

Hitachi PLC Network Connection Interface



Web Controller EH-WD10DR/WA23DR Palm sized All-in-One Controller



All features at a glance

Prover supply voltage 244 DC 000110/120 VAC (50/00Hz) 2002207204 VAC (50/00Hz) 200220724 VAC (50/00Hz) 2002 VAC (50/00Hz) 200	Model			EH-WD10DR	EH-WA23DR	
Current consumption 200/220/240 VAC (50/60/H2) Control OPU 32 bit-RISC-processor 0.2A (264 VAC) Processing system Scored program cyclic system Basic instructions: 2.5 is Noted program cyclic system Processing system Scored program cyclic system Basic instructions: 2.5 is Noted program cyclic system Memory User Program 256 points (TD-CU) max. 32 kByte Memory User Program Sk steps maximum max. 32 kByte Bit 1,384 words (WR) 50.176 words (WR) Net page 16/84 points (R) 24 V DC 13 points Analogue inputs - 24 V DC 14 points Analogue outputs - 24 V DC 14 points Analogue outputs - - Analogue outputs - - <td colspan="3" rowspan="2">Power supply voltage</td> <td>24V DC</td> <td>100/110/120 VAC (50/60 Hz)</td>	Power supply voltage			24V DC	100/110/120 VAC (50/60 Hz)	
Current consumption 0.15A 0.4 A (100 VAC) 0.2A (264 VAC) Control Processing system Stored program cyclc system Processing system Stored program cyclc system Processing system Stored program cyclc system Timer/Counter 26 bit-RISC-processor Timer/Counter 26 bit-RISC-processor Timer/Counter 26 bit-RISC-processor Timer/Counter 26 bit-RISC-processor Timer/Counter 26 bits (PL-CU) Timer/Counter 35 steps maximum Memory Bit 1,984 points (PI) Velocity Stored program 50.176 words (MF) Input Application instructions: Several (WRM) 50.176 words (MF) Velop age Word 16,384 points (R) Sorits (PL) Value Application units 24V DC 3 points 24V DC 13 points Analogue outputs					200/220/240 VAC (50/60 Hz)	
Control Processing system Processing system 32 bit-RiSC-processor Processing system Stored program cyclc system Processing system 32 bit-RiSC-processor Timer/Counter 256 points (TD-CU) max. 32 kByte Timer/Counter 256 points (TD-CU) max. 32 kByte Memory User Program 36 steps maximum max. 32 kByte User Program Bit 1,984 points (R) 50.716 words (WR) Web page Bit Word shared 16,384 words (VR) 50.716 words (WR) Nutput Bitword shared 16,384 words (VR) 50.716 words (MVR) Output Bitword shared 16,384 words (VR) 50.716 words (MVR) Mex. number of expansion units rot available 1-64 kByte (n total 320 kByte) Output Max. number of expansion units rot available 1-64 kByte (n total 320 kByte) Serial communication protocol relies /4 points 4.90 bords Communication address rot available -64 kByte (n total 320 kByte) Serial communication address rot available -64 kByte (n total 320 kByte) Serial communication pr	Current consumption			0.15A	0.4 A (100 VAC)	
Control CPU 32 bit-RISC-processor Non-constructions Processing system Stored program cyclic system Basic instructions: 2.5 µs Application instructions: 2.5 µs Timer/Counter 256 points (TD+CU) Basic instructions: 2.5 µs Application instructions: 2.5 µs Memory User Program SNTP (Simple Network Time Protocol) max. 32 kByte Memory Data Bit 1.984 points (R) 50,176 words (WR) Memory Digital inputs 1.984 points (R) 50,176 words (WR) Memory Digital inputs 24V DC 6 points 24V DC 13 points Maxing and the program inputs - 24V DC 6 points 24V DC 13 points Analogue outputs - 1ch (D-10V or 0-20mA) 2ch (D-10V or 0-20mA) Maxing and analogue outputs - - 1ch (D-10V or 0-20mA) Analogue outputs - - 1ch (D-10V or 0-20mA) Maxing and analogue outputs - - 1ch (D-45) Maxing and analogue outputs - - 1ch (D-10V or 0-20mA) Communication protocol Cyclic/Event samatinum					0.2 A (264 VAC)	
Processing system Stored program cyclic system Processing speed Basic instructions: 2.5 yeta Timer/Counter 256 points (TD+CU) Time data String Conditions: 2.5 yeta Memory User Program 3k steps maximum Data Bit 1,944 points (FR) Word 18,344 points (FR) 50,176 words (WR) Input Data Bit 1,944 points (FR) Vord 18,344 words (WR) 50,176 words (WR) Input Digital inputs 24V DC 13 points Adogue inputs Protocols 24V DC 13 points Communication Protocol (DV or 0-20mA) 24V DC 10V or 0-20mA) Max. number of expansion units not available 4 Communication protocol Freating conditions 90 POI-50 (FR) Serial Communication protocol Surger Social (FR) 100 POI-50 (FR) Serial communication protocol Serial Surger Social (FR) 4 Communication protocol Surger Social (FR) Surger Social (FR) 4 Serial communication protocol Surger Socia	Control	CPU		32 bit-BISC-processor		
Processing speed Base instructions: 25 µ arms Timer/Counter 256 points ftD+CJ) Time data SNTPP (Simple Network Time Protocol) Memory Bit 1,934 points (R) Data Bit 1,934 points (R) Web page 110,384 points (NP) 50,176 words (WR) Input Digital inputs 18,384 words (WR) 50,176 words (WR) Output Digital inputs 18,384 words (WR) 50,176 words (WR) Output Digital inputs 18,384 words (WR) 50,176 words (WR) Output Digital inputs 24V DC 13 points 104 words (WR) Output Digital outputs 24V DC 3 points 104 (-0.10V or 0-20mA) Analogue outputs - 101 (P-10V or 0-20mA) - Communication Ethernet 108ASE-T 1ch (FJ-45) 105ASE-T 1005ASE-TX 1ch (FJ-45) Serial Ton (P-10V or 0-20mA) RS-232C (FS-420mA) RS-232C (FS-420mA) communication Ethernet 108ASE-T 1ch (FJ-45) RS-232C (FS-420mA) Serial continue Vectocol SMTP RS-232C (FS-420mA)		Processing system		Stored program cyclic system		
Application instructions's Several 10 µs Timer/Counter 256 points (TP-CD) Memory User Program 3k steps maximum max. 32 kByte User Program 3k steps maximum max. 32 kByte Memory User Program 3k steps maximum max. 32 kByte Memory User Program 3k steps maximum max. 32 kByte Memory User Program 3k steps maximum max. 32 kByte Memory User Program 3k steps maximum max. 32 kByte Memory Word 16384 words (WR) 50.176 words (WR) Input Digital inputs 52 kV DC 13 points 62 kV DC 13 points Analogue inputs - 10 kV DC 3 points - Analogue outputs - 10 kD-10 v or 0-20 mA) - Max. number of expansion units not available 4 - Communication Serial - 10 kD-10 vor 0-20 mA) Serial communication protcol R5-232C, 10 (R)-45) HS-232C, RS-222/485 1ch (R)-45) Filternet communication protcol Serial continons up to		Processing speed		Basic instructions: 2.5 us		
Timer/Counter 256 points (TD+CU) Here Notes Memory User Program Sk steps maximum max. 32 kByte Data Bit 1,984 points (R) 50.176 words (WR) Web page 16,384 words (WR) 50.176 words (WR) Input Digital inputs 18,384 words (WR) 50.176 words (WR) Neb page Bit/word shared 18,384 words (WR) 50.176 words (WR) Input Digital inputs 24V DC 6 points 24V DC 13 points Analogue outputs Relay 4 points 24V DC 13 points 24V DC 13 points Analogue outputs - 10th (0-10V or 0-20mA) 10th (0-10V or 0-20mA) Analogue outputs - 10th (R)-45) 10BASE-T/ 100BASE-TX 1ch (R)-45) Ethernet Communication protocol Hatch 'IPLC Ethrenet HiProtocol (Command, Slave) Crucic/Event sending, Auto receiving Serial communication specifications Protocol Serial conditions up to 8 for each condition Serial communication specifications Serial continue up to 8 for each condition Serial continue Serial communication Protocol Hitach				Application instructions: Several 10 us		
Memory User Program Bit Strip (Simple Network Time Protocol) Werd Bit 1.984 points (R) 50.176 words (MR) Data Bit 1.984 points (R) 50.176 words (MR) Word 16.384 words (MR) 50.176 words (MR) Input User Program 24V DC 15 points / 1.024 words (MVM) Web page 16.384 words (MR) Variable 1 - 64.KByte (in total 320.KByte) Input Digital inputs 24V DC 6 points 24V DC 15 points Analogue inputs - 2ch (0-10V or 0-20mA) Analogue inputs - 2ch (0-10V or 0-20mA) Analogue outputs - 108ASE-Tr100PASE-TX toh (R)-45) Relay 10 points Analogue outputs - 108ASE-Toh (R)-45) RS-232C, RS-422/485 toh (R)-45) Communication Communication protocol Serial Communication Serial sending Ethernet Communication Polo-before-SMTP (selectable) Serial sending condition address yup to 16 User certification polo-before-SMTP (selectable) Serial sending condition address yup to 8 for each conditin		Timer/Counter		256 points (TD+CU)		
Memory User Program Image: Set		Time data		SNTP (Simple Network Time Protocol)		
Data Bit 1,984 points (R) 50,176 words (WR) Input 16,384 words (WR) 50,176 words (WR) Input Digital inputs 16,384 words (WR) 50,176 words (WR) Input Digital inputs 24V DC 6 points 24V DC 13 points Analogue inputs - 24V DC 6 points 24V DC 0 20mA) Output Digital cutputs - 2ch (0-10V or 0-20mA) Max. number of expansion units not available 4 Communication Ethernet 108ASE-T1 to (RJ-45) 108ASE-T1 vol (NJ or 0-20mA) Serial - 108ASE-T1 to (RJ-45) RS-232C, RS-422/485 to (RJ-45) Ethernet communication protocol Communication protocol Serial Serial Serial sending Protocol SMTP Selectable) Selectable) Sending conditions up to 16 Up to 16 Up to 16 Destination address up to 16 Selectable) Selectable) Sending conditions up to 16 Communication selectable) Selectable Sending conditions up to 16<	Memory	User Program		3k steps maximum	max. 32 kByte	
Word 16,384 words (WR) 50,176 words (WR) Ueb page 16,384 points /1,024 words (MVM) Variable 1 - 64 KByte (in total 320 kByte) Input Digital inputs 24V DC 6 points 24V DC 13 points Output Digital inputs 24V DC 6 points 24V DC 13 points Analogue outputs - 1ch (0-10V or 0-20mA) Analogue outputs - 1ch (0-16V or 0-20mA) Serial - 10BASE-T1ch (RJ-45) RS-232C, RS-422/485 1ch (RJ-45) Ethernet Communication protocol Serial Serial communication yeb series Serial communication Potocol Serial communication address yeb series Serial communication Serial communication address Serial communication ad		Data	Bit	1,984 points (R)	,	
Bit/word shared 16,384 points / 1,024 words (M/MM) Unput Web page 16,894 points / 1,024 words (M/MM) Variable 1 - 644kByte (in total 320kByte) Input Digital inputs 24V DC 6 points 24V DC 13 points Analogue inputs - 24V DC 70-20mA) Output Analogue outputs - 2ch (0-10V or 0-20mA) Analogue outputs - 1ch (0-10V or 0-20mA) Max. number of expansion units not available 4 Communication Serial - 10BASE-T1ch (RJ-45) RS-232C, RS-422/485 Tch (RJ-45) Ethernet Communication protocol Serial Serial Protocol SMITP communication speefing conditions up to 16 Destination address Up to 16 Destination address up to 8 for each condition Serial communication Supported PLC Hitch IP Coll PiProtocol (Command, Master) Supported PLC Hitach IP LC HiProtocol (Command, Ma			Word	16,384 words (WR)	50,176 words (WR)	
Web gage 16kbyte x8, 8kbyte x16, 4kbyte x16 Variable 1- 64kByte (in total 320 kByte) Input Digital inputs 24V DC 6 points 24V DC 13 points Analogue inputs Pailogue inputs 24V DC 6 points 24V DC 6 20 mm Output Digital outputs Relay 4 points Relay 10 points Analogue outputs Relay 4 points Relay 10 points Max. number of expansion units not available 4 Communication Serial Tot R04250 R52320 (not R4250) Serial Communication protocol R52320 (not R4250) R52320 (not R4250) Specifications Output Hitachi PLC Ethernet HiProtocol (Command, Slave) communication specification Porocol SMTP User certification User certification User certification Veb server Protocol Send text 256 characters maximum Veb server Protocol Hitachi H series/Hitachi Et series Supported PLC Hitachi H series/Hitachi Et series Hitachi H Series/Hitachi Et series serial communication specification series Supported PLC Hitachi H Series/Hit			Bit/word shared	16,384 points / 1,024 words (M/WM)		
Input Digital inputs Analogue inputs 24V DC 6 points 24V DC 6 points 24V DC 6 points Output Analogue inputs - 2ch (0-10V or 0-20mA) Output Analogue outputs Relay 4 points Relay 4 points Relay 10 points Analogue outputs not available 4 1ch (0-10V or 0-20mA) Max. number of expansion units not available 4 Communication Ethernet 10BASE-T 1ch (RJ-45) 10BASE-T/100BASE-TX 1ch (RJ-45) Serial Fmail sending Protocol RS-232C (not (RJ-45)) RS-232C, RS-422/485 1ch (RJ-45) Specifications Communication protocor Hitachi PLC Ethernet HiProtocol (Command, Slave) Communication (RJ-45) Specifications Finall sending Protocol Sufficience POP-before-SMTP (selectable) Specifications ext to calcing conditions up to 16 Destination address up to 16 Destination address up to 8 for each condition Specifications Supported PLC Hitachi PLC HiProtocol (Command, Master) Specifications HTTP version 1.0 Function Hitachi PLC PLO/O/O/O/		Web page		16kbyte x8, 8kbyte x16, 4kbyte x16	Variable 1 - 64 kByte (in total 320 kByte)	
Analogue inputs - 2ch (0-10V or 0-20mA) Output Digital outputs Relay 4 points Relay 10 points Analogue outputs - 1 ch (0-10V or 0-20mA) Max. number of expansion units not available 4 Communication Ethernet 0BASE-T1 ch (RJ-45) 10BASE-T1 ch (RJ-45) 10BASE-T1 ch (RJ-45) Ethernet Communication province RS-232C 1ch (RJ-45) RS-232C, RS-422/485 1ch (RJ-45) Specifications Communication province RS-232C 1ch (RJ-45) RS-232C, RS-422/485 1ch (RJ-45) Specifications Communication province RS-232C 1ch (RJ-45) RS-232C, RS-422/485 1ch (RJ-45) Specifications Communication specification POP-before-SMTP (selectable) Relay 10 points Specifications Protocol Smith Smith 2000 Smith 2000 Velb server Protocol Smith 2000 Smith 2000 Smith 2000 Specifications Active-HiProtocol Protocol Maxith 2000 Smith 2000 Specifications Active-HiProtocol Protocol Hitach I H series/Hitachi I H series H-20/28/07/00/2002/02/20	Input	Digital inputs		24V DC 6 points	24V DC 13 points	
Output Analogue outputs Max, number of expansion units or available Relay 4 points Fielay 10 points Max, number of expansion units not available 4 Communication Ethernet Serial 10BASE-T1 (h (R)-45) 10BASE-T/100BASE-TX 1ch (R)-45) Ethernet communication proto-outputs Communication proto-outputs RS-232C 1ch (R)-45) RS-232C (R)-422/485 1ch (R)-45) Serial Communication proto-outputs Protocol Serial Serial Serial Serial Protocol Serial Serial Serial Serial Serial Serial Protocol Serial conditions up to 16 Serial		Analogue inputs		-	2ch (0-10V or 0-20mA)	
Analogue outputs Max, number of expansion units - no available Analogue outputs Max, number of expansion units - no available Max, number of expansion Serial	Output	Digital outputs		Relay 4 points	Relay 10 points	
Max. number of expansion units not available 4 Communication Ethernet 10BASE-11ch (RJ-45) 10BASE-T1ch (RJ-45) Serial RS-232C 1ch (RJ-45) RS-232C, RS-422/485 1ch (RJ-45) Ethernet communication protocol Communication protocol Hitachi PLC Ethernet HiProtocol (Command, Slave) specifications Protocol SMTP SMTP Paral sending Protocol SMTP Serial communication specifications up to 16 Destination address up to 8 for each condition Destination address up to 8 for each condition Encode Encode Specifications Protocol Motor address up to 8 for each condition Specifications Protocol Protocol Encode Specifications Protocol Protocol Hitachi PLC HiProtocol (Command, Master) Specifications Protocol Protocol Hitachi H series/Hitachi EH series Specifications Protocol Protocol Hitachi H series/Hitachi EH series Specifications Protocol Communication speed Auto-detection with matching connected PLC <td colspan="2">Analogue outputs</td> <td>-</td> <td>1 ch (0-10 V or 0-20 mA)</td>		Analogue outputs		-	1 ch (0-10 V or 0-20 mA)	
Communication Ethernet Serial 10BASE-T 1 ch (RJ-45) 10BASE-T/100BASE-TX 1 ch (RJ-45) Ethernet communication specifications Communication protocol Htach i PLC Ethernet HiProtocol (Command, Save) Specifications Protocol Mitach i PLC Ethernet HiProtocol (Command, Save) Specifications Protocol Vp to 16 Web server HTTP version 1.0 Web server HTTP version 1.0 Specifications Specification server/Version Nonitor and set I/O Specifications Specification server/Version 1.0 Specifications Specification server/Version Nonitor and set I/O Specifications Protocol Hitach i PLC HiProtocol (Command, Master) Specifications Specification server/Version 1.0 Specifications Protocol Hitach i PLC HiProtocol (Command, Master) Specifications Protocol Hitach i PLC HiProtocol (Command, Master) Specifications Protocol Hitach i PLC HiProtocol (Command, Master) Specifications Protocol Hitach i PLC HiProtocol (Command, Stave) Specifications Protocol		Max. number of expansion units		not available	4	
Serial RS-232C 1ch (RJ-45) RS-232C, RS-422/485 1ch (RJ-45) Ethernet communication specifications Communication protocol (Communication specifications Communication protocol (Communication specifications Protocol SMTP Image: Protocol Sending conditions Up to 8 for each condition Send text Up to 8 for each condition Up to 8 for each condition Web server HTTP version 1.0 HTTP version 1.0 Serial communication specifications Active-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Master) Serial communication specifications Active-HiProtocol Protocol Hitachi H series/Hitachi EH series H-20/28/40/64, H-200/250/252 H-300/700/2000/4010 EH-150, Micro-EH Supported PLC Hitachi H series/Hitachi EH series H-20/28/40/64, H-200/250/252 H-300/700/2000/4010 EH-150, Micro-EH Connected devices Ommunication speed Auto-detection with matching connected PLC H-300/700/2000/4010 EH-150, Micro-EH ENEX HOP COL ENEX HOP COL Passive-HIProtocol Protocol Hitachi PLC HiProtocol (Command, Slave) Frotocol General Communication Protocol Hitachi H/LT HPLC Final Seending Hitachi PLC HiProtocol (Command, Slave) Frotocol Protocol Hitachi PLC HiProtocol (C	Communication	Ethernet		10BASE-T 1ch (RJ-45)	10BASE-T/100BASE-TX 1ch (RJ-45)	
Ethernet communication specifications Communication protocol Hitachi PLC Ethernet HiProtocol (Command, Slave) Ocyclic/Event sending, Auto receiving specifications F-mail sending Protocol SMTP user certification POP-before-SMTP (selectable) SMTP Destination address up to 16 Destination address up to 8 for each condition up to 8 for each condition Sending conditions up to 8 for each condition Sending conditions up to 8 for each condition Sending conditions up to 8 for each condition Send text 256 characters maximum Veb server HTTP version Function Honolor and set I/O Serial communication Supported PLC Supported PLC Hitachi H series/Hitachi EH series H-20/28/40/64, H-200/250/252 H-300/700/2000 H-300/700/2000 H-300/700/2002/40010 EH-150, Micro-EH Data size Pasive-HiProtocol Communication speed Auto-detection with matching connected PLC Data size Protocol Hitachi PLC HiProtocol (Command, Slave) Pasive-HiProtocol Connected de		Serial		RS-232C 1ch (RJ-45)	RS-232C, RS-422/485 1ch (RJ-45)	
communication specifications F-mail sending F-mail sending Protocol SMTP Sending conditions User certification POP-before-SMTP (selectable) Sending conditions up to 16 Destination address up to 8 for each condition Send text 256 characters maximum Web server HTTP version Function Monitor and set I/O Serial communication Protocol specifications Protocol Server Protocol Communication specification specifications Protocol Protocol Supported PLC Hitachi H series/Hitachi H series +-20/28/40/64, H-200/250/252 H-300/700/2000 H-302/702/1002/2002/4010 EH-150, Micro-EH Communication speed Auto-detection with matching connected PLC Data size Read: Max.120 words, Write: Max.100 words Passive-HiProtocol Protocol Hitachi PL C LiProtocol (Command, Slave) General Protocol Hitachi PL C LiProtocol (Commands (TRNS0/RECV0) TIRNS0: only sending after renceiving Protocol Communication	Ethernet	Communication protocol		Hitachi PLC Ethernet HiProtocol (Command	d, Slave)	
specifications F-mail sending Protocol SMTP User certification POP-before-SMTP (selectable) POP-before-SMTP (selectable) User certification up to 8 for each condition up to 8 for each condition Send text 256 characters maximum 256 characters maximum Web server HTTP version 1.0 Serial communication Protocol Monitor and set I/O specifications Protocol Protocol Hitachi PLC HiProtocol (Command, Master) Supported PLC Hitachi H series/Hitachi EH series H-20/28/40/64, H-200/250/252 H-300/700/2000 H-302/702/1002/2002/4010 EH-150, Micro-EH Communication speed Auto-detection with matching connected PLC Data size Read: Max.120 words, Write: Max.100 words Read: Max.120 words, Write: Max.100 words General Protocol Hitachi PLC HiProtocol (Command, Slave) Communication by ladder commands (TRNS0/RECV0) TRNS0: only sending, receiving, sending receiving Protocol Communication by ladder commands (TRNS0/RECV0)	communication			Cyclic/Event sending, Auto receiving		
Jest of the server User certification POP-before-SMTP (selectable) Sending conditions up to 16 Destination address up to 8 for each condition Send text 256 characters maximum Web server HTTP version 1.0 Function Monitor and set I/O Send text Serial communication specifications Active-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Master) Supported PLC Hitachi H series/Hitachi EH series H-20/28/40/64, H-200/250/250/250/250/250/250/250/250/250/	specifications	E-mail sending	Protocol	SMTP		
Sending conditions up to 16 Destination address up to 8 for each condition Send text 256 characters maximum Web server HTTP version 1.0 Function Monitor and set I/O Function Serial communication specifications Active-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Master) Supported PLC Hitachi H series/Hitachi EH series H-20/250/252 H-300/700/2000 H-302/702/1002/2002/4010 EH-150, Micro-EH Communication speed Auto-detection with matching connected PLC Passive-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Slave) Passive-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Slave) Connected devices HMI/products supported Hitachi H/E PLC General Protocol HMI/products supported Hitachi H/E PLC Communication Protocol TRNS0: only sending, receiving after sending (RECV0)			User certification	POP-before-SMTP (selectable)		
Destination address up to 8 for each condition Send text 256 characters maximum Web server HTTP version Function Monitor and set I/O Serial communication specifications Active-HiProtocol Protocol Protocol Supported PLC Hitachi PLC HiProtocol (Command, Master) Hitachi H series/Hitachi EH series H-300/700/2000 H-300/700/2002/4010 EH-150, Micro-EH Communication speed Auto-detection with matching connected PLC Passive-HiProtocol Passive-HiProtocol General Communication General Communication Protocol Hitachi PLC HiProtocol (Command, Slave) HMI/products supported Hitachi H/EH PLC Communication Protocol Communication by ladder commands (TRNS0/RECV0) TRNS0: only sending, receiving after sending RECV0: only receiving, sending after receiving			Sending conditions	up to 16		
Note Send text 256 characters maximum Web server HTTP version 1.0 Function Monitor and set I/O Serial communication specifications Active-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Master) Supported PLC Hitachi H series/Hitachi EH series H-20/28/40/64, H-200/250/252 H-300/700/2000 H-302/702/1002/2002/4010 EH-150, Micro-EH Communication speed Auto-detection with matching connected PLC Passive-HiProtocol Protocol Protocol Hitachi PLC HiProtocol (Command, Slave) Passive-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Slave) General Protocol HiMi/products supported Hitachi H/EH PLC Communication speed HMI/products supported Hitachi H/EH PLC Communication Protocol TRNS0: only sending, receiving after sending			Destination address	up to 8 for each condition		
Web server HTTP version 1.0 Serial communication specifications Active-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Master) Supported PLC Hitachi PLC HiProtocol (Command, Master) Hitachi H series/Hitachi EH series H-20/28/40/64, H-200/250/250/252 H-300/700/2000 H-302/702/1002/2002/4010 H-302/702/1002/2002/4010 EH-150, Micro-EH Communication speed Auto-detection with matching connected PLC Data size Read: Max.120 words, Write: Max.100 words Passive-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Slave) General Protocol Hiltachi PLC HiProtocol (Command, TRNS0/RECV0) Communication Protocol Communication by ladder commands (TRNS0/RECV0) TRNS0: only sending, receiving after sending RECV0: only receiving, sending after receiving ReCV0)			Send text	256 characters maximum		
Serial communication specifications Active-HiProtocol Protocol Protocol Hitachi PLC HiProtocol (Command, Master) Number of the protocol protocol Supported PLC Hitachi H series/Hitachi EH series H-20/28/40/64, H-200/250/250/252 H-300/700/2000 H-302/702/1002/2002/4010 EH-150, Micro-EH Communication speed Auto-detection with matching connected PLC Data size Read: Max.120 words, Write: Max.100 words Passive-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Slave) General Connected devices Hiltachi PLC HiProtocol (Commands (TRNS0/RECV0) General Protocol Communication by ladder commands (TRNS0/RECV0) TRNS0: only sending, receiving after receiving RECV0: only receiving, sending after receiving		Web server	HTTP version	1.0		
Serial communication specifications Active-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Master) Supported PLC Hitachi H series/Hitachi EH series H-20/28/40/64, H-200/250/252 H-300/700/2000 H-300/700/2000/H-302/702/1002/2002/4010 EH-150, Micro-EH Communication speed Auto-detection with matching connected PLC Passive-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Slave) Passive-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Slave) General Onnected devices Hiltachi PLC HiProtocol (Command, Slave) Gommunication Protocol Communication by ladder commands (TRNS0/RECV0) TRNS0: only sending, receiving after receiving RECV0: only receiving, sending after receiving			Function	Monitor and set I/O		
specifications Supported PLC Hitachi H series/Hitachi EH series H-20/28/40/64, H-200/250/252 H-300/700/2000 H-300/700/2002/4010 Hitachi H series/Hitachi EH series H-20/28/40/64, H-200/250/252 H-300/700/2002/4010 H-300/702/2002/4010 Hitachi H series/Hitachi EH series H-300/702/2002/4010 Hitachi PLS Hitachi EH series H-20/28/40/64, H-200/250/252 H-300/700/2002/4010 H-300/702/2002/4010 Hitachi PLS Hitachi PLS Hitachi PLS Passive-HiProtocol Protocol Read: Max.120 words, Write: Max.100 words Passive-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Slave) General Onnected devices HMI/products supported Hitachi H/EH PLC Communication Protocol Communication by ladder commands (TRNS0/RECV0) TRNS0: only sending, receiving after sending RECV0: only receiving, sending after receiving	Serial communication specifications	Active-HiProtocol	Protocol	Hitachi PLC HiProtocol (Command, Master)		
H-20/28/40/64, H-200/250/252 H-300/700/2000 H-302/702/1002/2002/4010 EH-150, Micro-EH Communication speed Auto-detection with matching connected PLC Data size Read: Max.120 words, Write: Max.100 words Passive-HiProtocol Protocol Connected devices HMI/products supported Hitachi H/EH PLC General Connected devices General Protocol Communication TRNS0: only sending, receiving after sending RECV0: only receiving, sending after receiving			Supported PLC	Hitachi H series/Hitachi EH series		
H-300/700/2000 H-302/702/1002/2002/4010 EH-150, Micro-EH Communication speed Auto-detection with matching connected PLC Data size Read: Max.120 words, Write: Max.100 words Passive-HiProtocol Protocol General Connected devices General Protocol Communication Protocol HMI/products supported Hitachi H/EH PLC Communication TRNS0: only sending, receiving after sending RECV0: only receiving, sending after receiving				H-20/28/40/64, H-200/250/252		
H-302/702/1002/2002/4010 EH-150, Micro-EH Communication speed Auto-detection with matching connected PLC Data size Read: Max.120 words, Write: Max.100 words Passive-HiProtocol Protocol Connected devices HMI/products supported Hitachi H/EH PLC General Protocol Communication Protocol Rec2: Max.120 words, Write: Max.100 words HMI/products supported Hitachi H/EH PLC Communication Communication by ladder commands (TRNS0/RECV0) TRNS0: only sending, receiving after sending RECV0: only receiving, sending after receiving				H-300/700/2000		
Passive-HiProtocol Protocol Hitachi PLC HiProtocol (Communication by ladder commands (TRNS0/RECV0) General Protocol Hitachi PLC HiProtocol (Communication by ladder commands (TRNS0/RECV0) Communication Protocol HMI/products supported Hitachi H/EH PLC Communication Protocol Communication by ladder commands (TRNS0/RECV0) ReCV0: only receiving, sending receiving after receiving RECV0: only receiving, sending after receiving				H-302/702/1002/2002/4010		
Passive-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Slave) General Protocol Hill/products supported Hitachi H/EH PLC Communication Protocol Communication by ladder commands (TRNS0/RECV0) Receiving, sending, receiving after sending RecV0: only receiving, sending after receiving						
Passive-HiProtocol Protocol Hitachi PLC HiProtocol (Command, Slave) General Protocol HMI/products supported Hitachi H/EH PLC Communication Protocol Communication and sensitive sensite s			Communication speed	Auto-detection with Matching connected PLC Read: Max 120 words. Write: Max 100 words		
Passive-hiprotocol Protocol Hildchi PLC Connected devices HMI/products supported Hitachi H/EH PLC General Protocol Communication by ladder commands (TRNS0/RECV0) Communication TRNS0: only sending, receiving after sending RECV0: only receiving, sending after receiving		Passive-HiProtocol	Data size	Hitachi PL C Hiprotocol (Command, Slavo)		
General Protocol Communication Protocol Communication Protocol Communication TRNS0: only sending, receiving after sending RECV0: only receiving, sending after receiving			Connected devices	HMI/products supported Hitachi H/EH PLC		
Communication TRNS0: only sending, receiving after receiving RECV0: only receiving, sending after receiving		Gonoral	Protocol	Communication by ladder commands (TRNS0/REC\/0)		
RECV0: only receiving, sending after receiving		Communication	FIOLOCOI	TPNSO: only conding, receiving after condin	TRNS0: only sending, receiving after sending	
				RECVO: only receiving sending after receiving		
Communication speed 300 to 57 600 hps			Communication speed	300 to 57 600bps	19	
Data size Max 1.024 bytes (each sending and receiving)			Data size	Max 1 024 bytes (each sending and receiving)		
Mounting Disk and other section of the section of t	Mounting			DIN rail or wall mounting	DIN rail or wall mounting	

Mounting



EH-WA23DR Dimensions



Hitachi Europe GmbH

Niederkasseler Lohweg 191 · D-40547 Düsseldorf Tel. +49-211-52 83 -0 Internet: www.hitachi-ds.com E-Mail: info@hitachi-ds.com

Software Structure

Newly developed "Sporadic Server Method" allows the Web Controller to switch between the Ethernet communication process and the PLC engine process, without losing data integrity.



255-BW DB-EHWD10-02/07-E