

# Yokogawa Paperless Portable Recorders

**NEW**

- High resolution TFT color display
- Innovative two point touch screen for control & viewing
- Modular inputs & outputs
- Up to 100 analog channels (GP20)
- Variety of data & graphic display screens
- Non-volatile internal & removable data memory
- Modbus/TCP standard, Modbus/RTU optional
- Portable metal case with IP65 splashproof screen
- Real time remote monitoring from a web browser
- Free setup, viewing & analysis software



## ORDERING INFORMATION

To Order, Insert Code for Each Letter to Select Catalog Number.

**A** - **B** / **C** / **D** / **E** Example: GP10-1E1D/MT/UH/UC10/CR11

A	Model	
GP10	Data acquisition unit; portable; 5.7" display	
GP20	Data acquisition unit; portable; 12.1" display	
B	Memory/Power	
-1E1D	Standard memory, 100-240 VAC power, US cord	
C	Options	
/C2	RS-232 serial Modbus RTU	
/C3	RS-422/485 serial Modbus RTU	
/UH	USB interface, dual ports	
/MC	Communication channels*	
/D5	VGA output (GP20 only)	
/FL	Fail output, 1 relay	
/LG	Log scale & scientific notation display	
/MT	Math computation capability (includes report functions)	
/AS	Advanced security functions (complies with FDA 21CFR Part 11)	
D	Analog input options (select one or none)	slots req'd
/UC10	Universal analog input; 10 ch; clamp terminals	1
/UC20	Universal analog input; 20 ch; clamp terminals	2
/UC30	Universal analog input; 30 ch; clamp terminals	3
/UC40	Universal analog input; 40 ch; clamp terminals (GP20 only)	4
/UC50	Universal analog input; 50 ch; clamp terminals (GP20 only)	5
/US10	Universal analog input; 10 ch; screw terminals	1
/US20	Universal analog input; 20 ch; screw terminals	2
/US30	Universal analog input; 30 ch; screw terminals	3
/US40	Universal analog input; 40 ch; screw terminals (GP20 only)	4
/US50	Universal analog input; 50 ch; screw terminals (GP20 only)	5
E	Digital I/O options (select one or none)	
/CR01	Digital input; 16 inputs	1
/CR10	Digital output; 6 output relays	1
/CR11	Digital I/O; 16 inputs and 6 output relays	2
/CR20	Digital output; 12 output relays (GP20 only)	2
/CR21	Digital I/O; 16 inputs and 12 output relays (GP20 only)	3
/CR40	Digital output; 24 output relays (GP20 only)	4
/CR41	Digital I/O; 16 inputs and 24 output relays (GP20 only)	5

\*Required to read & display channels from other Modbus devices.

Model	GP20	GP10
Color LCD Display:	12.1" TFT (800×600)	5.7" TFT (640×480)
No. of module slots:	10	3
Analog input channels:	100 max.	30 max.
No. of math channels (/MT option):	100	50
No. of comm. channels (/MC option):	300	50

These recorders include a touch screen display and smart user interface to: capture & save waveforms, output image files, scroll through data, review historical trends, display digital values at any location, zoom on time axis, draw or write on waveform area and many other capabilities.

## SPECIFICATIONS

Communications:	Ethernet 10BASE-T/100BASE-TX standard
Configuration:	Cascade max. 4 level (10BASE-T), max. 2 level (100BASE-TX), segment length: Max. 100 m
Functions:	E-mail client, FTP client, FTP server, Web server, SNMP client, SNMP server, DHCP client, Modbus/TCP client/server (client requires /MC option)
Security functions:	Key lock, user login, SSL support
Clock functions:	With calendar function, accuracy: ±5 ppm (0 to 50°C)
Internal flash memory:	500MB
External storage:	SD memory card, up to 32GB (FAT32 or FAT16), 1GB incl. with /UH option: USB2.0 external flash memory (Keyboard/mouse: USB1.1)
Rated supply voltage:	90 to 132 VAC, 180 to 264 VAC; 50/60 Hz
Power consumption:	Max 110 VA @ 240 VAC (GP20), 60 VA @ 240 VAC (GP10)
Insulation resistance:	≥20 MΩ between Ethernet or RS-422/485 and each insulation terminal and earth (at 500 VDC)
Withstand voltage:	3000 VAC for 1 minute between power terminal & earth
Temperature:	0-50°C operating, 20-80% RH non-condensing
Dimensions (W×H×D)	
GP10:	144×168×197 mm (144×168×248 including modules)
GP20:	288×318×197 mm (288×318×248 including modules)
Universal Analog Input Module UC10 & US10	
DCV:	20 mV, 60 mV, 200 mV, 1 V, 2 V, 6 V, 20 V, 50 V
Standard signal:	0.4-2 V, 1-5 V
RTD:	Pt100, JPt100, Cu10 GE, Cu10 L&N, Cu10 WEED, Cu10 BAILEY, Cu10 (20°C) α=0.00392, Cu10 (20°C) α=0.00393, Cu25 (0°C) α=0.00425, Cu53 (0°C) α=0.00426035, Cu100 (0°C) α=0.00425, J263B, Ni100 (SAMA), Ni100 (DIN), Ni120, Pt25, Pt50, Pt100 WEED, Cu10 GOST, Cu50 GOST, Cu100 GOST, Pt46 GOST, Pt100 GOST
Thermocouple:	R, S, B, K, E, J, T, N, W, L, U, W97Re3-W75Re25, KpvsAu7Fe, Platinel 2, PR20-40, NiNiMo, W/WRe26, N(AWG14), XK GOST
DI:	Level, Contact
DC current:	0-20 mA, 4-20 mA, external shunt resistor
Scan intervals:	100/200/500 ms, 1/2/5 s
Insulation resistance:	≥20 MΩ between inputs & internal circuitry (at 500 VDC)
Withstand voltage:	3000 VAC for 1 minute between inputs & internal circuitry, 1000 VAC for one minute between analog input channels
Measuring accuracy:	20 mV DC: ± (0.01% of reading + 5 μV) 6V (1-5V) DC: ± (0.01% of reading + 2 mV) Pt100 RTD: ± (0.02% of reading + 0.2 °C)
Digital Input Module CR01	
Input types:	Open collector or non-voltage contact
Open collector:	≤0.5 V DC when ON, leakage ≤0.5 mA when OFF
Non-voltage contact:	Resistance of 200 Ω or less when ON, 50 kΩ when OFF
Contact rating:	12 V DC, 20 mA or more
Insulation resistance:	≥20 MΩ between inputs & internal circuitry (at 500 VDC)
Withstand voltage:	1500 VAC for 1 minute between inputs & internal circuitry
Digital Output Module CR10	
Output types:	Form C relay contact
Rated load voltage:	100 to 240 V AC or 5 to 24 V DC
Max. load:	264 VAC or 26.4 VDC, 3A/point (resistance load)
Insulation resistance:	≥20 MΩ between outputs & internal circuitry (at 500 VDC)
Withstand voltage:	3000 VAC for 1 minute between outputs & internal circuitry