



# SMART 920

920 MHz band wireless communication instrument series

Lower wiring costs and increase flexibility with  
920 MHz wireless communication

# Reliable Wireless Data Transfer

## Secure 920 MHz wireless network

SMART 920 creates a wireless Modbus RTU connection between SMARTDAC+ systems and UT52A/UT32A controllers. SMART 920 supports installation in areas where traditional cable connections are impossible.

GX20 and GM10 master units and GM10 and UT52A/UT32A slave units. This supports distributed.

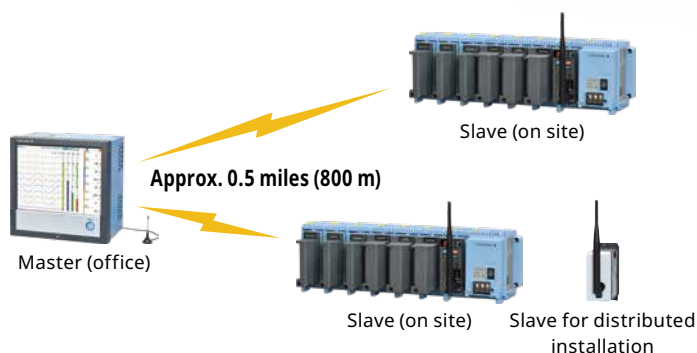


**GX20**

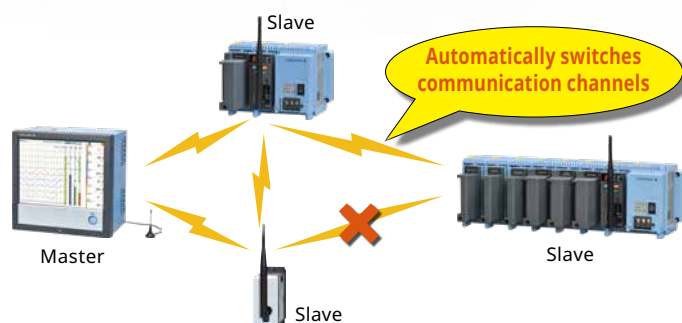
Easily acquire and record data wirelessly from slave devices.

## SMART 920 Series Lineup

## Securely Share



Stable wireless communication function

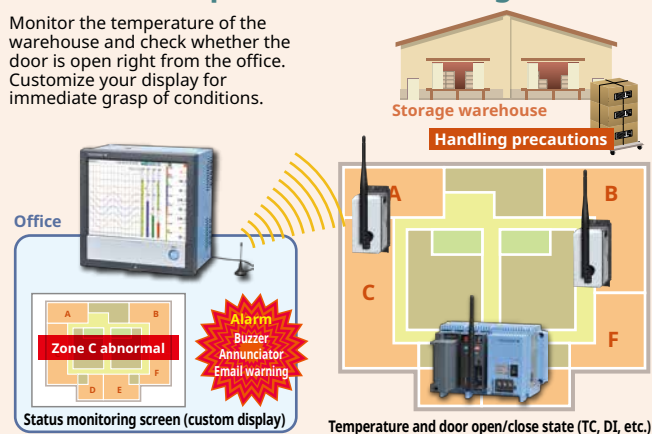


Automatic channel switching with multi-hop technology

# Wireless Monitoring for a Variety of Applications

## Storage warehouse door state and temperature monitoring

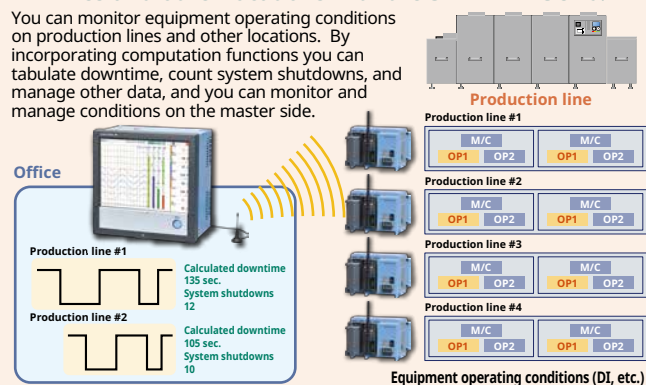
Monitor the temperature of the warehouse and check whether the door is open right from the office. Customize your display for immediate grasp of conditions.



## Monitor Production Line Equipment Operating Conditions

Monitor equipment operating conditions on production lines and other locations with the SMARTDAC 920.

You can monitor equipment operating conditions on production lines and other locations. By incorporating computation functions you can tabulate downtime, count system shutdowns, and manage other data, and you can monitor and manage conditions on the master side.







## GM10

Wirelessly transmit measurement data from slave to master.  
The 920 can also function as a repeater.

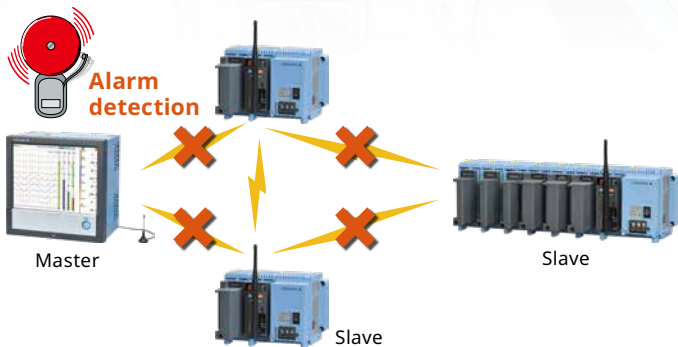


## UT52A/UT32A

The multi-function I/O device\*1 is ideal for wirelessly monitoring a limited number of items, such as detecting operating conditions and abnormalities. The UT52A is ideal for connecting the I/O with a 10-segment linearizer, square root, or similar function. For a less sophisticated I/O device, the UT32A is recommended.

\*1. Comes with PID control or ladder program computation functions and a serial gateway function.

## Important Data



Alarm detects and alerts when communication is lost

Modbus master commands: Up to 100  
Communication channels: Up to 500 (large memory)



Supports a broad range of applications from small to multi-point

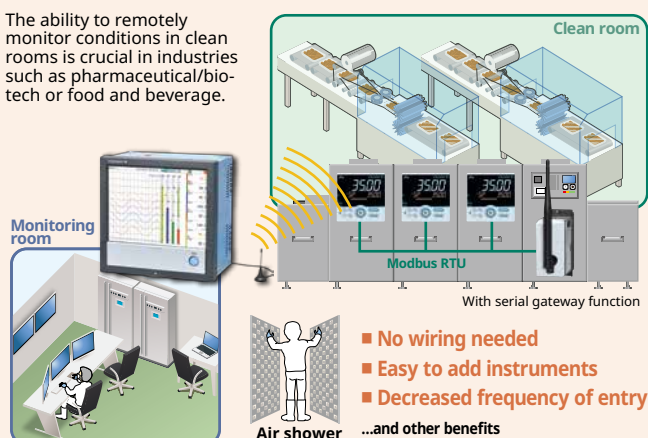
Approximate max. connected units  
and update intervals

Connected GM units	Update interval		
	1 S	2 S	5 S
1	370 ch	500 ch	500 ch
2	250 ch	500 ch	500 ch
4	160 ch	500 ch	500 ch
8		320 ch	500 ch
12			500 ch
16			500 ch

Connected UT units	Modbus communication interval			
	500 ms	1 S	2 S	5 S
1	27 ch	100 ch	100 ch	100 ch
2	—	27 ch	100 ch	100 ch
4	—	—	27 ch	100 ch
8	—	—	—	58 ch

## Remotely Monitor Operating Conditions

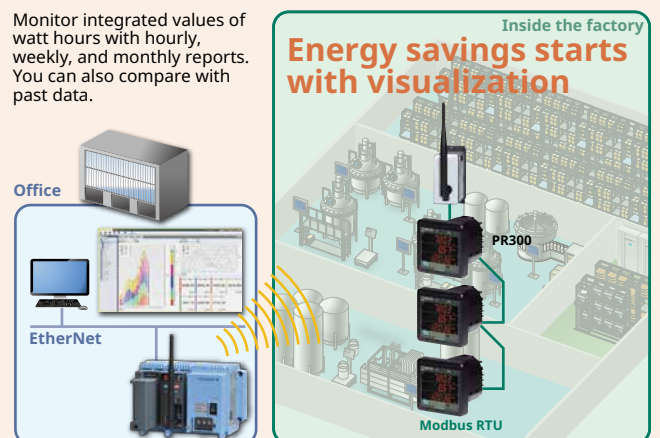
The ability to remotely monitor conditions in clean rooms is crucial in industries such as pharmaceutical/bio-tech or food and beverage.



- No wiring needed
- Easy to add instruments
- Decreased frequency of entry
- ...and other benefits

## Energy Monitoring

Monitor integrated values of watt hours with hourly, weekly, and monthly reports. You can also compare with past data.



Energy savings starts  
with visualization

# Lineup that supports a variety of applications

## GX20 Model and Suffix code

Model	Suffix Code	Optional code	Description
GX20			Paperless recorder (Panel mount type, Large display) *1
Type	-1		Standard (Max. measurement channels: 100 ch)
	-2		Large memory (Max. measurement channels: 500 ch)
Display language	E		English, degF, DST (summer/winter time) *2
Optional features		/AH	Aerospace heat treatment
		/AS	Advanced security function (Part 11)
		/BC	Black cover
		/BT	Multi-batch function
		/C2	RS-232 *3
		/C3	RS-422/485 *3
		/CG	Custom display *4
		/D5	VGA output
		/E1	EtherNet/IP communication (PLC communication protocol)
		/E2	WT communication *5
		/E3	OPC-UA server
		/E4	SLMP communication (Mitsubishi PLC)
		/FL	Fail output, 1 point
		/LG	Log scale
		/MT	Mathematical function (with report function) *6 *7
		/MC	Communication channel function *8
		/P1	24 V DC/AC power supply
		/PG	Program control function
		/UH	USB interface (Host 2 ports)
		/CM2	920 MHz wireless communication (master function) *3 *8

\*1 To connect an expandable I/O, GM sub unit, you will need one expansion module for the GX.  
 \*2 The Display language is selectable.  
 To confirm the current available languages, please visit the following website.  
 URL: <http://www.yokogawa.com/ns/language/>

\*3 /C2, /C3 and /CM2 cannot be specified together.

\*4 Creating custom displays requires DXA170 DAQStudio (sold separately). (GX does not have a creation function.)

\*5 /MC option must be separately specified when the WT communication is selected.

\*6 Optional code /MT (MATH) required if using the GX90XD's or GX90WD's pulse input.

\*7 The /MT option (computation) is required to perform pulse integration on GX90XP pulse input modules.

\*8 If you want to load data from other devices into the GX using Modbus client, a communication channel (/MC) is required.

## GM10 Model and Suffix code

Model	Suffix Code	Optional code	Description
GM10			Data Acquisition Module for SMARTDAC+ GM
Type	-1		Standard (Max. measurement channels: 100)
	-2		Large memory (Max. measurement channels: 500)
Area	E		General
—	0		Always zero
Optional features		/AH	Aerospace heat treatment
		/AS	Advanced security function
		/BT	Multi-batch function
		/C3	RS-422/485 *1
		/C8	Bluetooth
		/E1	EtherNet/IP communication (PLC communication protocol)
		/E2	WT communication *2
		/E3	OPC-UA sever
		/E4	SLMP communication (Mitsubishi PLC)
		/MT	Mathematical function (with report function) *3 *4
		/MC	Communication channel function *5
		/LG	Log scale
		/PG	Program control function
		/CM2	920 MHz wireless communication (master function) *1 *5
		/CS2	920 MHz wireless communication (slave function) *1 *5

\*1 /C3, /CM2 and /CS2 cannot be specified together.

\*2 Communication channel function (/MC option) must be specified at the same time with WT communication.

\*3 Optional code /MT (MATH) required if using the GX90XD's or GX90WD's pulse input.

\*4 Optional code /MT (MATH) required if using the GX90XP's pulse integration.

\*5 If you want to load data from other devices into the GM using Modbus client, a communication channel (/MC) is required.

## GM90PS Model and Suffix code

**For 100–240 VAC power (inlet), GM90PS-1N1□0/W**

**For 100–240 VAC power (M4 screw), GM90PS-1N1W0/W**

**For 12–28 VDC power (M4 screw), GM90PS-1N2W0/W**

For the GX90□□I/O modules, GX60 expansion unit, GX90EX expansion modules, GM90MB module base, add-ons and accessories, see the GX/GP or GM catalogs.  
 GX/GP catalogs No.: Bulletin 04L51B01-01EN  
 GM catalogs No.: Bulletin 04L55B01-01EN

## UT52A Model and Suffix code

**UT52A-00B-11-00/MDL**

Optional suffix codes : /DC, /CT

\* For details on the UT52A, see the UT52A (DIN rail type) general specifications (GS05P01C81-01EN).

## UT32A Model and Suffix code

**UT32A-00B-11-00/MDL**

Optional suffix codes : /DC, /CT, /CV

\* For details on the UT32A, see the UT32A (DIN rail type) general specifications (GS05P01C81-01EN).

### Ordering requirements

- \* Specify either the GX20 or GM10 as the master
- \* Specify the GM10, UT52A, or UT32A as the slave or repeater device
- \* Specify a sleeve or rooftop antenna for the wireless antenna

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KP-S-1E

Printed in Japan, 710(KP)  
 [Ed : 01/b]

## Accessories

**Sleeve antenna**  
 (Part no. : A1061ER)



Used when installing with the main unit, such as inside the casing. For indoor use.

**Rooftop antenna**  
 (Part no. : A1062ER)



For use when installing separately from the main unit. Can be used outdoors.

**Wall mount bracket for UT52A/UT32A**

Model: UTAP005