

Easy connection to PROFINET devices

SMARTDAC+ series

Easily connect to a PROFINET network with the GX90NW Network Module

SMARTDAC+ with the GX90NW module installed connects to PROFINET networks.



GX90NW



Features

Connecting to a PROFINET network will simplify your system and significantly reduce engineering costs

- ▶ Send and receive process data, without programming
- ▶ SMARTDAC+ operations can be controlled by the PLC program for a fully automated system

SMARTDAC+ is used in a wide range of applications.



Pharmaceuticals



Foods



Chemical plant



Energy

Application Example (Sterilization Equipment for Pharmaceuticals)

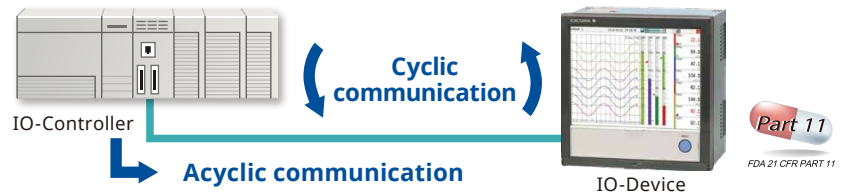
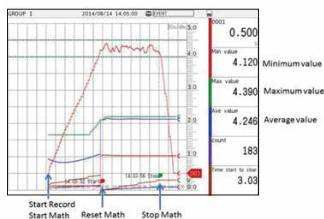
The SMARTDAC+ is connected to the sterilizer's PLC for a secure and reliable exchange of batch information for independent recording and reporting.



Sterilization Equipment

Benefits for End Users

- ▶ Seamless integration with PLC network infrastructure
- ▶ Secure data recording compliant with pharmaceutical industry regulations (21 CFR Part 11, option /AS)
- ▶ Standard solution for batch recording and reporting (batch name, lot number, batch text entry fields)
- ▶ Independent data analysis and mathematical operations (option /MT)
- ▶ Standard displays for monitoring (trend, digital, bargraph, alarm)
- ▶ Customized HMI (option /CG)



FDA 21 CFR PART 11

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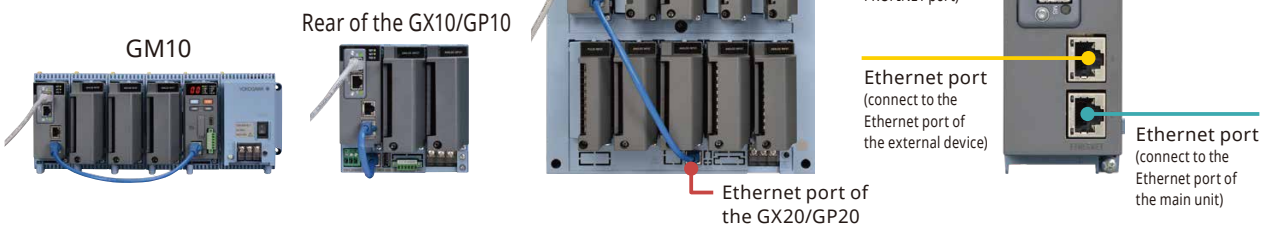
GX90NW Network Module

Mounting and connection

GX90NW location

- ▶ GX20/GP20 : Slot 9
- ▶ GX10/GP10 : Slot 2
- ▶ GM10: Leftmost

※Subunits cannot be connected when using the GX90NW.



Installing device profiles

It is necessary to install the device profile (GSDML file) of the SMARTDAC+ to the PLC configuration tool. The PLC communicates with SMARTDAC+ based on the information in the GSDML file. You can download GSDML files from our website (www.smartdacplus.com/software/en/).

SMARTDAC+ data accessible from the PLC

Cyclic communication	<p>PLC exchanges data according to GSDML file information</p> <ul style="list-style-type: none"> • Readable data: Input/Output and Math measurement and status information, and communication channels status information • Writeable data: Communication channel measurements <p>*There are limits to the channels that support cyclic communication.</p>
Acyclic communication	<p>Data exchange/control by a PLC ladder program</p> <ul style="list-style-type: none"> • Target channels: All input/output channels (except expansion unit), all math/communication channels • Readable data: Channel measurements/status information • Writeable data: Communication channel measurements, AO/DO channel output values <p>< Control operations > Record start/stop, math start/stop/reset, writing messages, reading and writing batch information, reading and writing alarm settings, alarm ACK</p>

Model and suffix codes

Model	Suffix code	Description
GX90NW		Network Module
Port	-02	2 ports
Type	-PN	PROFINET
	N	Always N
Terminal form	-R	RJ-45 Connector
Area	N	General

* For more details, please see the General Specifications (GS 04L53B51-01EN).

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Specifications

	Model	GX90NW
Ethernet port	Communication speed	10BASE-T/100BASE-TX (Auto)
	Port	2 ports
	Connection cable	STP cable, CAT5 or later
PROFINET port	Communication range	100m
	Communication speed	100BASE-TX full duplex
	Port	2 ports
PROFINET communication specifications	Connection cable	PROFINET communication cable
	Communication range	100m
		Type: PROFINET IO-Device Conformance class: B Support for cyclic and acyclic communication

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