

# General Specifications

GS 04L51B01-77EN

## Model 773230 Validation Document for SMARTDAC+ (for the /AS option)



### Overview

The 773230 validation document for SMARTDAC+ applies to advanced security option (option code /AS) models of the SMARTDAC+ GX/GP Series Paperless Recorders and the SMARTDAC+ GM Data Acquisition System. It is a structured format (model) of the protocol for validating installation, configuration, and main functionality.

Use of this document in combination with your operating policies and procedures should make things easier for you or your validation staff.

### Contents

The following documents are included.

- Installation/Configuration/Function Verification Protocol for the Yokogawa SMARTDAC+ Paperless Recorder GX10/GX20/GP10/GP20/GX60
- Installation/Configuration/Function Verification Protocol for the Yokogawa SMARTDAC+ Data Acquisition System GM
- Installation/Function Verification Protocol for the Yokogawa SMARTDAC+ STANDARD PC Application Software

### Installation/Configuration/Function Verification Protocol for the Yokogawa SMARTDAC+ Paperless Recorder GX10/GX20/GP10/GP20/GX60

#### Applicable Models

- SMARTDAC+ GX10/GX20/GP10/GP20
- SMARTDAC+ GX60/GM90MB/GM90PS
- SMARTDAC+ GX90XA/GX90XD/GX90WD/GX90YD/GX90XP/GX90YA/GX90EX

#### Installation Test \*1

- Confirmation of the availability of all hardware, firmware, and documentation
- Requirements for the basic operating environment of the GX/GP
- Verification of the basic components of the SMARTDAC+ GX/GP and their installation, including storage media and Ethernet connection

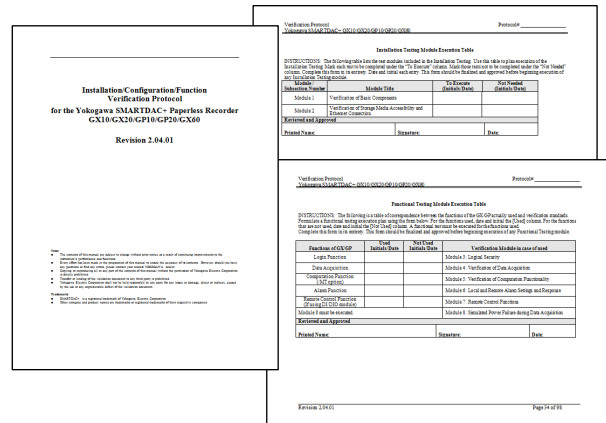
\*1 The objective of this installation test is to validate the factory default settings set on instruments. Please implement the actual settings that you will use in the target environment after performing the installation test, and before performing the configuration test and the functional test.

#### Configuration Test

- Configuration Table
- Verification of the configuration of the GX/GP

#### Functional Test \*3

- Audit Trail \*2
- Logical Security
- Data Acquisition, Calibration Correction, Electronic Signature, and Data Retrieval



- Computation Function
- Alarm Function (including Alarm Relay and E-mail Notification)
- Remote Control Function
- Simulated Power Failure during Data Acquisition
- Analog Output Function
- FTP File Transfer
- Communication Channel Function

\*2 The audit trail function validation is completed upon validation of the audit trail function of the SMARTDAC+ STANDARD software function validation.

\*3 If validations are required other than those included in this document (such as Modbus communications, and custom displays), and custom displays), please consult with your validation administrator. Note that the following operation modes and functions do not support the advanced security function:  
High speed measurement mode; dual interval mode; and PID control.

### Installation/Configuration/Function Verification Protocol for the Yokogawa SMARTDAC+ Data Acquisition System GM

#### Applicable Models

- SMARTDAC+ GM10
- SMARTDAC+ GX60/GM90MB/GM90PS
- SMARTDAC+ GX90XA/GX90XD/GX90WD/GX90YD/GX90XP/GX90YA/GX90EX

#### Installation Test \*4

- Confirmation of the availability of all hardware, firmware, and documentation
- Requirements for the basic operating environment of the GM
- Verification of the basic components of the SMARTDAC+ GM and their installation, including storage media, Ethernet connection, and Web application

\*4 The objective of this installation test is to validate the factory default settings set on instruments. Please implement the actual settings that you will use in the target environment after performing the installation

test, and before performing the configuration test and the functional test.

#### Configuration Test

- Configuration Table
- Verification of the configuration of the GM

#### Functional Test<sup>\*7</sup>

- Audit Trail<sup>\*5</sup>
- Logical Security
- Data Acquisition, Calibration Correction, and Data Retrieval<sup>\*6</sup>
- Computation Function
- Alarm Function (including Alarm Relay and E-mail Notification)
- Remote Control Function
- Simulated Power Failure during Data Acquisition
- Analog Output Function
- FTP File Transfer
- Communication Channel Function

\*5 The audit trail function validation is completed upon validation of the audit trail function of the SMARTDAC+ STANDARD software function validation.

\*6 Verification of retrieval of acquired data is completed under "Opening Data Files" in the functional test for the SMARTDAC+ software.

\*7 If validations are required other than those included in this document (such as Modbus communications, and custom displays), please consult with your validation administrator. Note that the following operation modes and functions do not support the advanced security function:  
High speed measurement mode; dual interval mode; and PID control.

### Installation/Function Verification Protocol for the Yokogawa SMARTDAC+ STANDARD PC Application Software

#### Applicable Models

- SMARTDAC+ STANDARD Universal Viewer
- SMARTDAC+ STANDARD Hardware Configurator

#### Installation Test

- Confirmation of the availability of all hardware, software, and documentation
- Requirements for the basic operating environment of the SMARTDAC+ STANDARD
- Verification of SMARTDAC+ STANDARD installation

#### Functional Test<sup>\*8</sup>

- Opening Data Files
- Electronic Signature
- Printing Data Files
- Converting files to Excel or ASCII Format
- Checking and Editing Hardware Settings
- Hardware Configurator communication function
- Verification of Audit Trail Function
- Opening Retrieved data file and backfill file
- Signing Backfill file

\*8 If validations are required other than those included in this document, please consult with your validation administrator.

### Installation/Configuration/Function Verification Protocol for the Yokogawa SMARTDAC+ GX/GP/GM Wireless Input Unit GX70SM (W option)

#### Applicable Models<sup>\*9</sup>

- SMARTDAC+ GX20/GP20
- SMARTDAC+ GM10
- SMARTDAC+ GX70SM

\*9 This verification is assumed to be performed together with "Installation/Configuration/Function Verification Protocol for the Yokogawa SMARTDAC+ Paperless Recorder GX10/GX20/GP10/GP20/GX60" or "Installation/Configuration/Function Verification Protocol for the Yokogawa SMARTDAC+ Data Acquisition System GM".

#### Installation Test<sup>\*10</sup>

- Confirmation of the availability of all wireless device hardware, firmware, and documentation
- Coordinator, Router, and GX70SM Configuration Test
- Wireless Input Unit Recognition

\*10 This verification is performed before the configuration test of "Installation/Configuration/Function Verification Protocol for the Yokogawa SMARTDAC+ Paperless Recorder GX10/GX20/GP10/GP20/GX60" or "Installation/Configuration/Function Verification Protocol for the Yokogawa SMARTDAC+ Data Acquisition System GM".

#### Functional Test<sup>\*11 \*12</sup>

- Wireless Data Retrieval
- GX70SM Connection

\*11 This verification is performed after the functional test of "Installation/Configuration/Function Verification Protocol for the Yokogawa SMARTDAC+ Paperless Recorder GX10/ GX20/GP10/GP20/GX60" or "Installation/Configuration/Function Verification Protocol for the Yokogawa SMARTDAC+ Data Acquisition System GM".

\*12 If validations are required other than those included in this document, please consult with your validation administrator.

### Installation/Function Verification Protocol for the Yokogawa SMARTDAC+ STANDARD Wireless Input Unit Tool (W option)

#### Applicable Models

- SMARTDAC+ STANDARD Wireless Input Unit Tool Wireless Input Unit Configurator
- SMARTDAC+ STANDARD Wireless Input Unit Tool Auto-Backfill Tool

#### Installation Test

- Confirmation of the availability of all hardware, software, and documentation
- Requirements for the basic operating environment of the SMARTDAC+ STANDARD Wireless Input Unit Tool
- Verification of SMARTDAC+ STANDARD Wireless Input Unit Tool installation

#### Functional Test<sup>\*13</sup>

- Read/Save the Wireless Retrieved Data
- Backfill

\*13 If validations are required other than those included in this document, please consult with your validation administrator.

## ■ PC System Requirements

Item	Description
Processor	Intel x64 or x86 processor that is equivalent to Intel Pentium 4, 3 GHz or faster
Main memory	2 GB or more
Hard disk	200 MB or more of free space
Printer	A4/Letter sized paper or larger
Operating System (OS)	Windows 8.1/8.1 Pro update 32-bit/64-bit, or Windows 10 Home/10 Pro /Enterprise/LTSC/LTSC x86 (32-bit)/x64 (64-bit)
Application Software	Microsoft Office Word 2007 or later

## ■ Model Code

Model	Optional code	Description
773230		Validation Document for SMARTDAC+
Optional features	/W	For GX70SM

## ■ Delivered Format

A license sheet is provided that contains the license key required for installation. The validation document (install program) is available for download at the following URL:

<<http://www.smartdacplus.com/software/en/>>

Installed documents are in Microsoft Office Word format.

## ■ Basic Conditions and Individual Contracts at the Time of Purchase

The warranty for this product is defined in the basic conditions and individual contracts at the time of purchase. The individual conditions are as follows.

- Validation documents

This product is designed to provide a structured format to reduce the workload of the validation process, it does not guarantee the outcome of the validation itself.

For the warranty of validation services, please contact the company that performed the validation work.

## ■ Trademarks

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