User Manual

NXI-F1020 Dual-slots Measurement&Control System Chassis

Hunan Next Generation Instrumental T&C Tech. Co., Ltd.

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Contents

1 Preface

Dear Customers,

First of all, we greatly appreciate your choice of NXI-F1020 series dual-slot measurement&control chassis (NXI-F1020 for short). We are also honored to introduce our company, Hunan Next Generation Instrumental T&C Tech. Co., Ltd. (NGI for short).

About Company

NGI is a professional manufacturer of intelligent equipment and test & control instruments, committed to developing, manufacturing battery simulators, power supplies, electronic loads, modular instruments, and many more instruments. The products can be widely used in the industries of battery, power supply, fuel cell, consumer electronics, new energy vehicle, semiconductor, etc.

NGI maintains close cooperation with many universities and scientific research institutions, and maintains close ties with many industry leaders. We strive to develop high-quality, technology-leading products, provide high-end technologies, and continue to explore new industry measurement and control solutions.

About User Manual

This manual is applied to NXI-F1020 series dual-slot measurement&control chassis, including installation, operation, specifications and other detailed information. The copyright of the manual is owned by NGI. Due to the upgrade of instrument, this manual may be revised without notice in future versions.

This manual has been reviewed carefully by NGI for the technical accuracy. The manufacturer declines all responsibility for possible errors in this operation manual, if due to misprints or errors in copying.The manufacturer is not liable for malfunctioning if the product has not correctly been operated.

To ensure the safety and correct use of NXI-F1020, please read this manual carefully, especially the safety instructions.

Please keep this manual for future use.

Thanks for your trust and support.

2 Safety Instructions

In the operation and maintenance of the instrument, please strictly comply with the following safety instructions. Any performance regardless of attentions or specific warnings in other chapters of the manual may impair the protective functions provided by the instrument.
NGI shall not be liable for the results caused by the neglect of those instructions.

2.1 Safety Notes

- **Confirm the AC input voltage before supplying power**.
- **Reliable grounding**: Before operation, the instrument must be reliably grounded to avoid the electric shock.
- **Confirm the fuse**: Ensure to have installed the fuse correctly.
- **Do not open the chassis**: The operator cannot open the instrument chassis. Non-professional operators are not allowed to maintain or adjust it.
- **Do not operate under hazardous conditions**: Do not operate the instrument under flammable or explosive conditions.
- **Confirm the working range**: Make sure the DUT is within NXI-F1020's rated range.

2.2 Safety Symbols

Please refer to the following table for definitions of international symbols used on the instrument or in the user manual.

Table 1

Symbol	Definition	Symbol	Definition
⎓	DC (direct current)	N	Null line or neutral line
~	AC (alternating current)	L	Live line
≂	AC and DC	I	Power-on
3~	Three-phase current	O	Power-off
⏚	Ground	⏻	Back-up power
⏚	Protective ground	⏻	Power-on state
⏚	Chassis ground	⏻	Power-off state
⏚	Signal ground	⚠	Risk of electric shock
WARNING	Hazardous sign	⚠	High temperature warning
Caution	Be careful	⚠	Warning

3 Product

3.1 Brief Introduction

NXI-F1020 is a measurement and control system chassis based on NXI architecture (Network eXtension Interface), it adopts Gigabit LAN interface with high bandwidth, low cost, high real-time, no master-slave limitation and other advantages. With compact dual-slot chassis, NXI-F1020 can accommodate two 4HP width modules or one 8HP width modules, suitable for desktop test applications and ATE system applications.

3.1.1 Features

- Electrical isolation between 2 slots
- Standard module design, accept arbitrary combination
- Support LAN/CAN communication
- Suitable for NXI modular instrument
- Built in Intelligent fan, heat dissipation without worry
- Power loaded up to 200W, no external power supply required
- Small size, available for desktop and integrated system test

3.2 Dimension

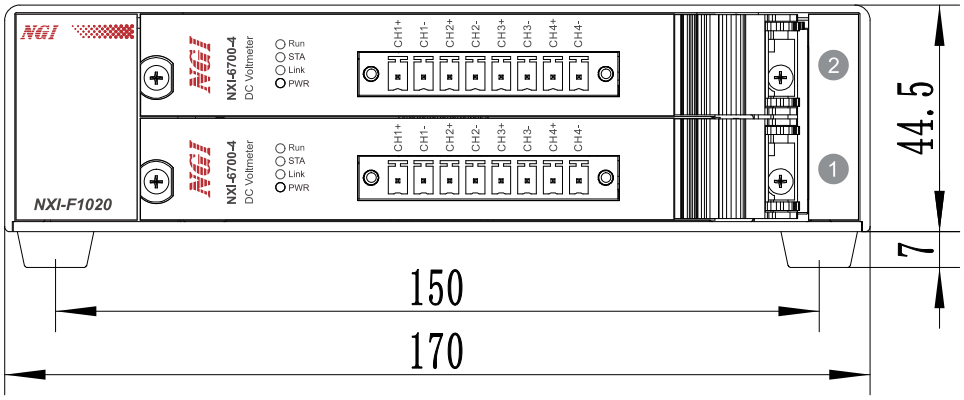

Figure 2 NXI-F1020 Front Panel Dimension

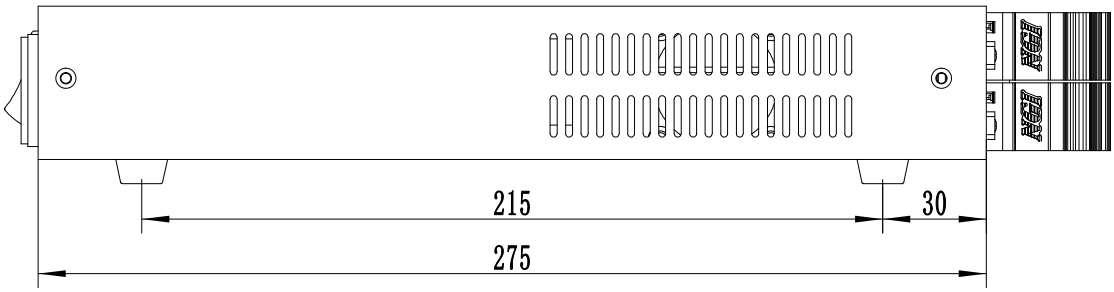

Figure 2 NXI-F1020 Side Dimension

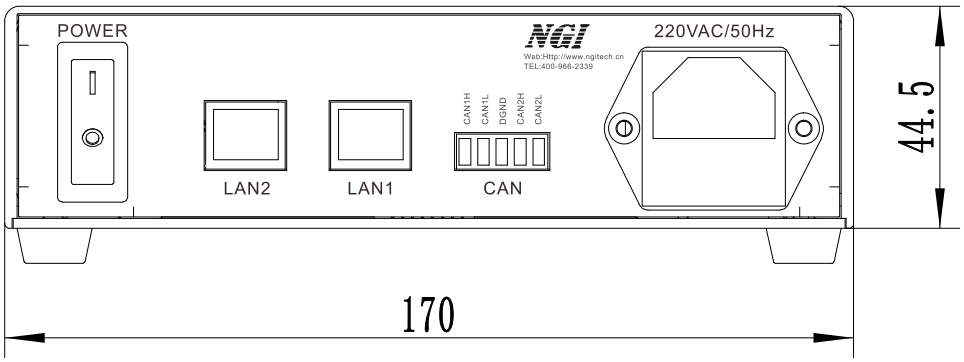

Figure 3 NXI-F1020 Real Panel Dimension

3.3 Front Panel

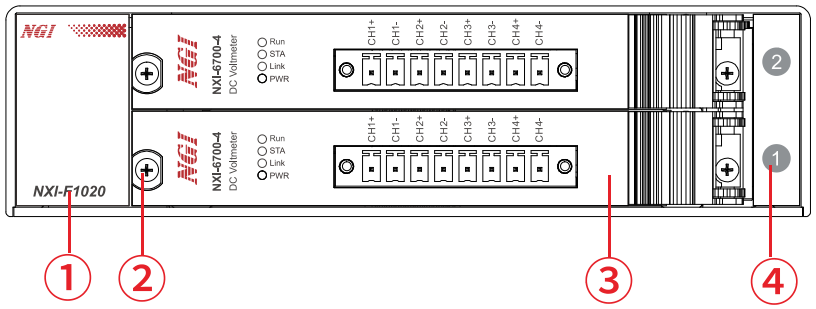

Figure 2 NXI-F1020 Front Panel

No.	Definition
①	Model
②	Setscrew
③	NXI series modular instrument slot
④	NXI modular instrument number， easily distinguishable instruments for LAN communication

3.4 Rear Panel

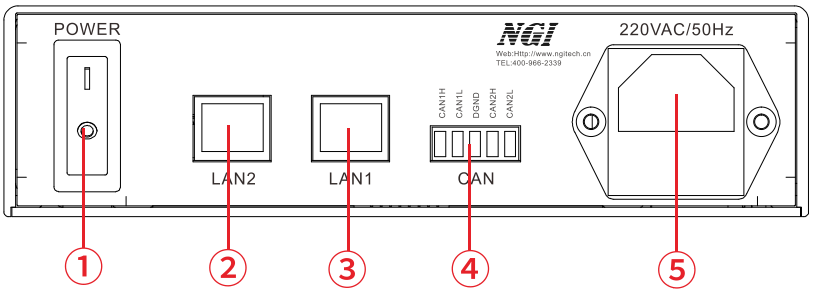

Figure 2 NXI-F1020 Rear Panel

No.	Name	Definition
①	POWER	Power Switch
②	LAN1	Communication with NXI Modular Instrument①
③	LAN2	Communication with NXI Modular Instrument②
④	CAN Interface	CAN1H、CAN1L、DGND、CAN2H、CAN2L in order，CAN2H CAN2L is to cascade the next F1020 chassis
⑤	power supply port	220VAC Input

Note:

- Do not plug or unplug module with electricity
- Before communicating, note whether the status lamp is normal or not.

4 Maintenance and Self-inspection

4.1 Regular Maintenance

Clean the Device

Please wipe lightly the device with a dry or slightly wet cloth, and do not wipe the inside of it. Make sure the power is disconnected before cleaning.

> ⚠ **Warning: Disconnect power before cleaning.**

4.2 Fault Self-inspection

Device Fault Self-inspection

Due to system upgrade or hardware problem, the device may break down. Please do the following necessary inspection to eliminate the troubles, which can save your maintenance and time cost. If the troubles cannot be recovered, please contact NGI.

The inspection steps are as below.

- Check whether the device is powered.
- Check whether the device can be turned on normally.
- Check whether the fuse has no damage.
- Check whether other connectors are correct, including wire cables, plug, etc.
- Check whether the system configuration is correct.
- Check whether all the specifications and performances are within the device working range.
- Check whether the device displays error information.
- Operate on a replacement device.

Calibration Intervals

It is suggested that NXI-F1020 series should be calibrated once a year.