



Before using the units

To use the units safely and effectively, please read this document and refer to GFK-2745 & GFK-2746 user manuals for further details.

Warnings and Cautions

Warning notices are used in this publication to emphasize that hazardous voltages, currents, temperatures, or other conditions that could cause personal injury exist in this equipment or may be associated with its use. In situations where inattention could cause either personal injury or damage to equipment, a Warning notice is used.

Warning!

- Installing or removing modules or wiring with power applied to the system or field wiring can cause an electrical arc. This can result in unexpected and potentially dangerous action by field devices. Arcing is an explosion risk in hazardous locations. Be sure that the area is non-hazardous or remove power appropriately before installing or removing modules or wiring.
- Potentially dangerous voltages are present on a module's terminals, even when system power is turned off. Field power must be turned off when installing or removing a Terminal Block assembly.
- Personnel who install, operate and maintain automation systems that contain these products must be trained and qualified to perform those functions.
- Overloading power modules or Network adapter can result into electric arc & damage to modules.

Caution notices are used where equipment might be damaged if care is not taken.

Caution!

- Check the rated voltage and terminal array before wiring.
- Ensure that specified environmental conditions are not exceeded. Avoid placing the module in direct sunlight.
- Review module specifications carefully, and ensure that input and output connections are made in accordance with the specifications.
- Use specified cables for wiring.
- Field Power Isolators must be used according to the requirements of the 5VDC/24VDC/48VDC or AC Voltage modules used in the system.
- If system power consumption exceeds the power limits, use system power expansion modules.
- System power and field power must be supplied from separate sources.

1. STXPBS001 Specifications*

Item	Specification	Item	Specification
Surrounding Air Temp./ Ambient Temp.	-20°C to 55°C for UL applications. -20°C to 60°C for non UL applications Storage -40°C to 85°C	Network Type	PROFIBUS-DP/V1
Relative Humidity	5% ~ 90%, without condensation	Network Cable	PROFIBUS-DP Special Cable
Durable-vib./impact	IEC 60068-2-6:1995	Cable Length	1.2Km ~ 100m
Mount Position	First module of RSTi system	Comm. Speed	9.6kBaud ~ 12MBaud
Atmosphere	No excessive dust ; No corrosive gases	Max. Station No.	101 Station(Include Master Scanner)
Field Supp.Volt.	Class II, 24VDC 24VDC (11VDC ~ 28.8VDC)	Station Type	PROFIBUS-DP Slave
Field Supply Current	Max. 10A	IO Modules	Max. 32 Module
I/O bus 5Vdc current	Max. 1.5A/5VDC	Max. Digital I/O	Input : 1,024point / Output : 1,024point
Mount	DIN-Rail	Max. Analog I/O	Input : 64Ch / Output : 64Ch
Size	42mm x 99mm x 70mm	I/O Data Size	Input : 128Bytes / Output : 128Bytes
Weight	155g	Baudrate Setting	Support Auto-baudrate
Certification	cULus/ CE / PROFIBUS	Station No. Sett.	Rotary S/W #1, #2 (x10, x1)
		Power Dissipation	60mA @24Vdc

* Specifications and designs may change without advance notice

Class II, adjacent to voltage rating (30Vmax.)

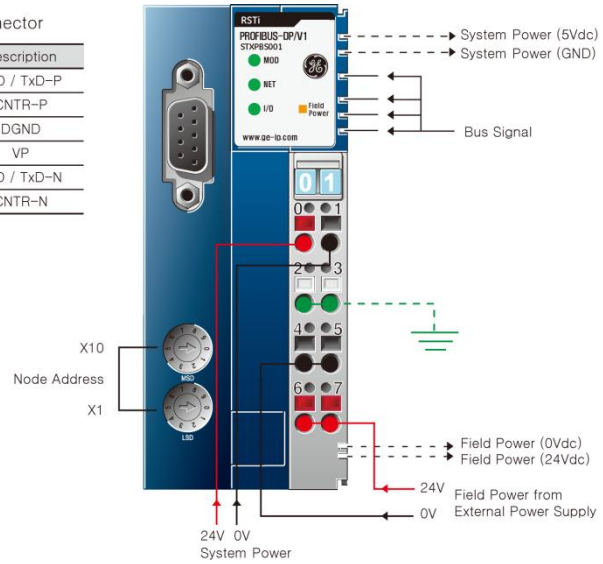
2. Cable wiring and Station Setting

► 2-1. PROFIBUS Wiring

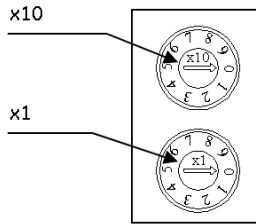


PROFIBUS Connector

Pin No.	Description
3	RxD / TxD-P
4	CNTR-P
5	DGND
6	VP
8	RxD / TxD-N
9	CNTR-N



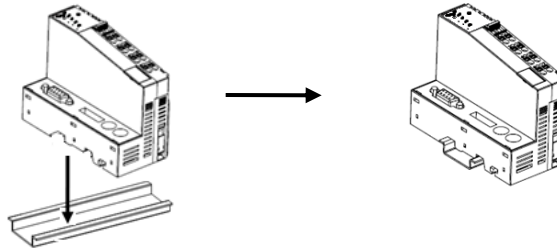
► 2-2. Station No. Setting



3. Module Mounting

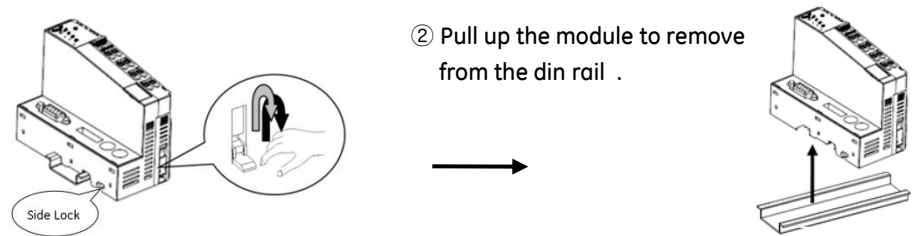
► 3-1. To mount on Din-Rail

- Press down the module lightly on the Din-Rail until it clicks & locks.



► 3-2. To dismount from Din-Rail

- Pull down the locking mechanisms by using small-bladed screw driver as the following pictures.



4. Electronic Documentation

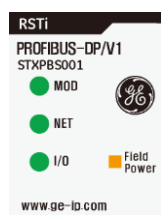
Manuals:

PACSystems RSTi I/O User Manual, GFK-2745

PACSystems RSTi PROFIBUS & PROFINET Network Adapter User Manual, GFK-2746

The most recent user documents are available on the Support website: <http://www.ge-ip.com/support>

5. LED Status Display



Item	LED is:	State	To indicate:
Module Status LED (MOD)	Off	No Power	No power is supplied to the unit.
	Solid Green	Device Operational	The unit is operating in normal condition.
	Solid Red	Unrecoverable Fault	The unit has occurred unrecoverable fault in self testing. - Invalid Module ID - Firmware fault - Hardware fault
Network Status LED (NET)	Off	Not Powered, Baudrate Search mode & No Data exchange mode	Device is in mode baudrate search or may not be powered
	Flashing Green	No Baudrate Search mode & No Data exchange mode	Device has searched baudrate and can be parameterized by a master, there is no cyclic user data exchange, Wait Parameter telegram, Parameter fault, Wait configuration telegram, Configuration fault
	Solid Green	Data exchange mode	Device is in the cyclic data exchange mode with the parameterization master
IO Module Status LED (I/O)	Off	Not Powered, No IO Module	Device has no IO module or may not be powered
	Solid Green	Bus On-line, Do not Exchanging I/O	Bus Operation is normal.
	Flashing Red	IO Configuration, Failed	Failed to initialize IO module -Detected invalid IO module ID -Overflowed Input / Output Size -Too many IO module -Initial protocol failure
	Solid Red	Bus connection fault, During exchanging I/O	One or more IO module occurred in fault state -Changed IO module configuration -Bus communication failure
Field Power LED (Field Power)	Off	Not Supplied Field Power	Not supplied 24Vdc field power
	Solid Green	Supplied Field Power	Supplied 24Vdc field power

6. Important Product Information

Release Information

Part Number	Hardware Version	Firmware Version	Date
STXPBS001-AA	20.00	20.000	Mar 2012

Upgrades

NA

Compatibility

Programming software	Proficy Machine Edition 7.0 , SIM9 or later
Configuration	Configured using Proficy Machine Edition when used with a GEIP PROFIBUS Controller module. GEIP_0DB2, Revision V1.003 GSD file available for import into 3rd-Party tools.

Problems Resolved in this Release

In previous release, DPV1 commands for the RSTi Profibus Network Adapter were disabled due to instability of the network adapter at baud rates less than or equal to 187.5kbps. This issue has been corrected in Proficy machine Edition 7.0 SIM 9.

New Features and Enhancements in this Release

NA.

Restrictions and Open Issues

Subject	Description
Slice IO node system power up sequence issue.	<p>If the Network Adapter and ST-7xxx Power modules on the same Slice IO node are power cycled at different times, the Network Adapter may power up in fault mode.</p> <p>To recover from the fault, power cycle the node such that Network Adapter and Power modules are power cycled together or the node is powered up following the sequence such that the power module farthest from the Network Adapter is powered up first.</p> <p>For example in a node having modules as below: STXPBS001+IO Modules ... +ST-7511+IO Modules ... +ST-7511+IO Modules</p> <p>In the above system power cycle the STXPBS001 and the two ST-7511 modules together or power OFF the entire node and then power ON the second ST-7511 and then the first ST-7511 and then the STXPBS001.</p>

Operational Notes

NA