

Distributed I/O  
**Advantys STB**  
The *open* device  
integration I/O system



*Simply Smart!*

Leveraging  
**ingenuity**  
and intelligence  
**ease of use.**

# Advantys STB

## Device integration made easy.

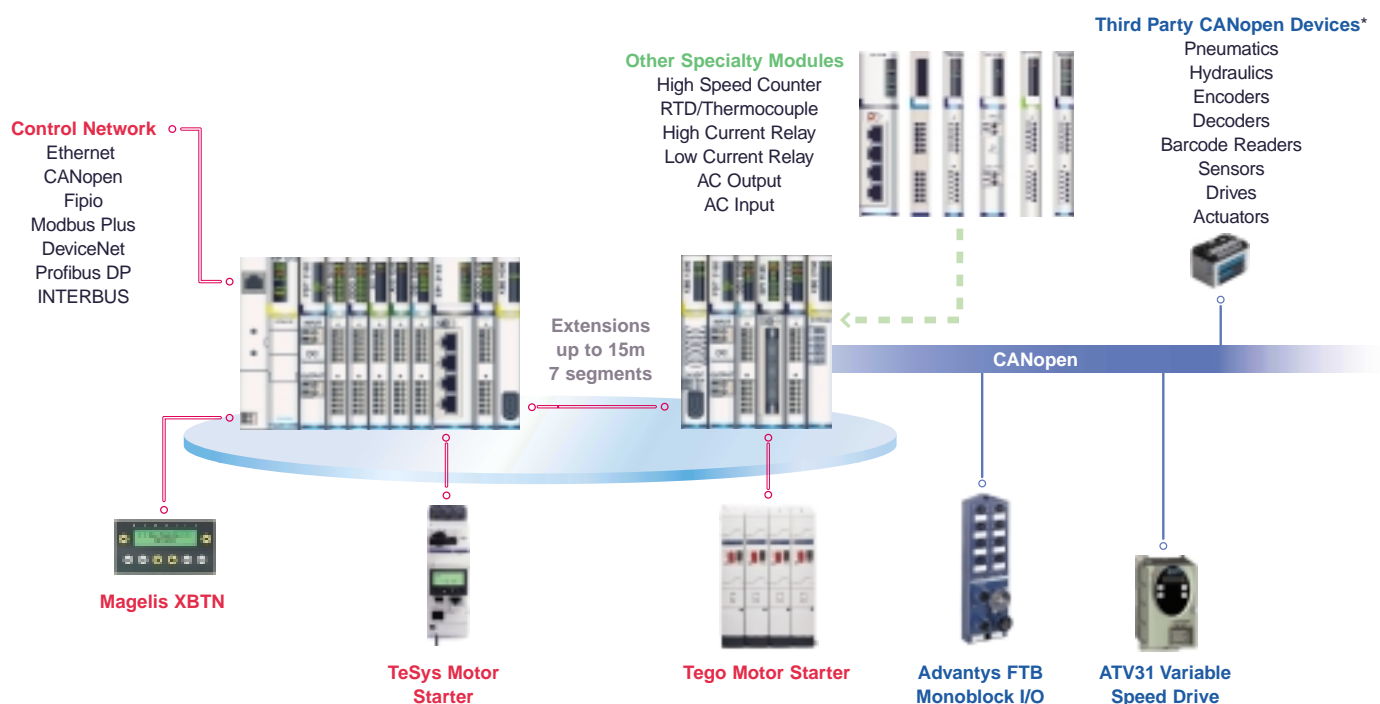
Advantys STB is a highly modular I/O platform, wiring solution and power management system that delivers the most effective and targeted control available today. Right from the start you will discover the difference — configuration software that is clever and powerful, network adaptability and system flexibility that are nimble and easy to implement, and attention to detail that makes Advantys STB the Simply Smart solution for all your distributed I/O needs.





## Simplified device integration

The open, plug-and-play architecture requires only a single fieldbus node to distribute I/O across an entire machine and is able to interface with any standard fieldbus. Separate power for input and output devices eliminates the need for extra terminals and protection devices. Advantys STB offers local reflex functionality for high-speed logic solving independent of the PLC master for improved system performance.

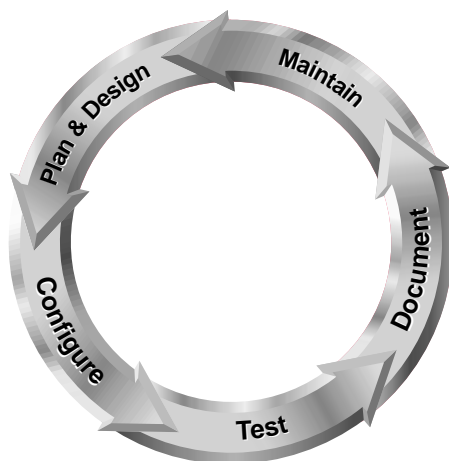


Advantys STB is the ideal device integration platform. It can be connected to many Schneider devices like Magelis HMI, TeSys motor starters, Altivar speed drives, or Advantys FTB and FTM IP67 I/O, as well as many third party devices.

## Intelligent system life cycle management: Configuration software that does more than just design

Advantys STB configuration software does more than simply allow you to design a system... it is a powerful tool that assists you through every phase of the product life cycle, from product selection all the way to system maintenance and diagnostics.

- Plan and design your entire system, including networks and third party devices
- Configure your I/O groups simply by selecting modules directly from the STB catalog and dragging them into the graphical view editor
- Validate the overall system design and check power and configuration settings
- Test I/O characteristics in simulation mode to correct any errors before you go online
- Create documentation for future reference in your choice of .pdf or .rtf format
- Initiate system commissioning, even without a fieldbus master
- Perform ongoing system diagnostics and troubleshooting to maximize productivity



\*For a list of commercially available CANopen nodes and products, see the CANopen product guide and product database at [www.canopen.org](http://www.canopen.org)

## Smart system features

Get more value from your I/O solutions with these intelligent features.

- Hot swap capabilities that optimize productivity and minimize downtime by allowing you to change modules without shutting down your machine
- Choice of auto-configured or software configurable parameters
- Integrated diagnostics to keep your system operating at its optimum
- Simple device integration at the system bus level
- Remote real-time data access from anywhere in the world using a simple web browser and the Ethernet network interface module
- Local real-time data access using local HMI through any network interface module

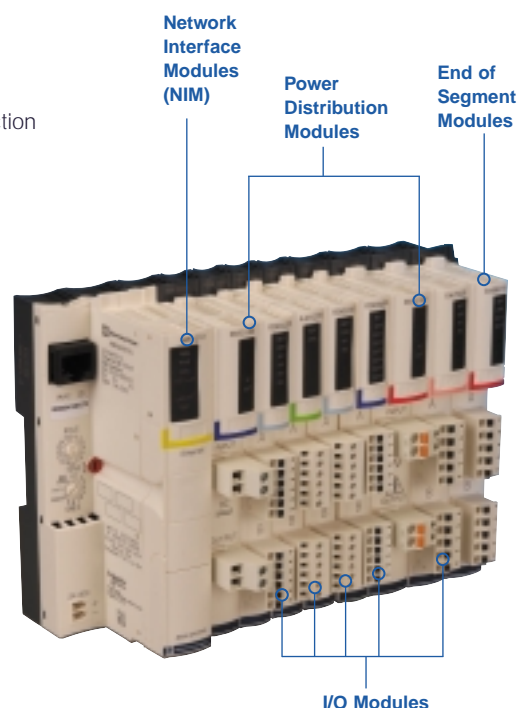
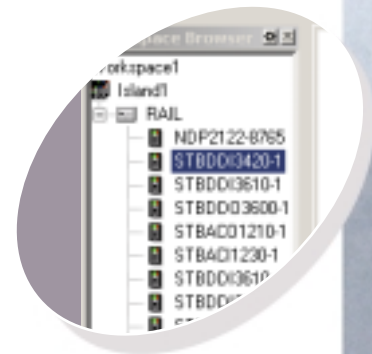
## Time-saving wiring and I/O features

Advanced functionality isn't enough if the I/O isn't easy to assemble and wire, so Advantys STB has incorporated several simple and ingenious ways to make things easy.

- I/O modules are simple to assemble and completely flexible in their placement
- They snap together and mount to DIN Rail without the use of special tools
- Removable spring or screw field wiring connectors are easy to wire and can be pre-wired to speed and facilitate installation
- I/O granularity of 2, 4, and 6 channels ensures that you only pay for the I/O you need, and nothing more
- Many specialty modules are available to meet a variety of applications, such as motor starters and high density I/O
- 5-contact field power distribution provides separate power for input and output devices
- Auto addressing for simple, error-free setup
- Built-in over current protection eliminates the cost of separate circuit protection
- Integrated LEDs provide real-time status of the module and I/O
- Integrated LED for diagnostic of the module and I/O

### Island Browser Tree

The island browser tree on the left shows you all the elements that you have selected for a particular island.

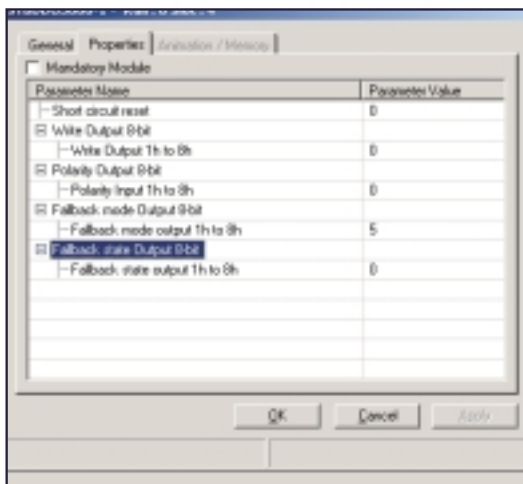






#### Module Catalog Browser Tree

The module catalog tree on the right displays all modules available in the product range. Simply click on one, drag it into the display window, and a graphical representation of the module drops into place.



#### Setting parameters is a click away

Once you have configured the basic structure of your island, simply double click on a module in either the Island browser view or graphical view to set the specific parameters (ex. fallback states, range settings, or module priorities).

## Configuration software that's smart and easy to use

Advantys STB configuration software provides a set of Windows-based tools that enable you to plan, model, customize, and test island bus designs and to download custom configurations to physical islands.

All Advantys STB I/O modules have factory-default parameter settings that allow them to be operational directly out of the box. You can also customize your island's operational capabilities with the configuration software, which allows you to:

- customize the operating parameters of the I/O modules
- create and implement reflex actions
- optimize island performance by assigning priority to certain modules
- designate certain application-critical modules as mandatory
- add preferred modules and/or standard CANopen devices to the island configuration
- validate that your island configuration adheres to Advantys STB design guidelines

## Reflex function blocks

Reflex function blocks allow Advantys STB to perform independent, local control for time critical applications, delivering true distributed control.

- High speed response of 1-3 ms
- Easy and quick to implement with Advantys STB configuration software
- All basic logical functions are supported, including compares, timers, counters, and boolean

Quickly and easily design all the parameters of your system with the intuitive graphical editor.

# Advantys STB Selection Guide

Advantys STB I/O and Network Interface Modules are now available in two different feature sets, Basic and Standard, offering a more scalable range to meet your needs.

**B** = BASIC: lower cost, limited feature set and non-configurable modules

**S** = STANDARD: full feature set and configurable parameters



I/O Modules	Product Number	Feature	Description
<b>Digital Input Modules</b>	STB DDI 3230	<b>S</b>	24 VDC IN 2pt sink 4wire 0.2ms cfg
	STB DDI 3420	<b>S</b>	24 VDC IN 4pt sink 3wire 0.5ms cfg
	STB DDI 3425	<b>B</b>	24 VDC IN 4pt sink 3wire IEC Type 3ms ltd diag non-cfg
	STB DDI 3610	<b>S</b>	24 VDC IN 6pt sink 2wire 1ms fixed
	STB DDI 3615	<b>B</b>	24 VDC IN 6pt sink 2wire IEC Type 1.5ms ltd diag non-cfg
	STB DAI 5230	<b>S</b>	115 VAC IN 2pt 3wire fixed
	STB DAI 7220	<b>S</b>	230 VAC IN 2pt 3wire fixed
<b>Digital Output Modules</b>	STB DDO 3200	<b>S</b>	24 VDC OUT 2pt source 0.5A OCP
	STB DDO 3230	<b>S</b>	24 VDC OUT 2pt source 2.0A OCP
	STB DDO 3410	<b>S</b>	24 VDC OUT 4pt source 0.5A OCP
	STB DDO 3415	<b>B</b>	24 VDC OUT 4pt source 0.25A OCP
	STB DDO 3600	<b>S</b>	24 VDC OUT 6pt source 0.25A OCP
	STB DDO 3605	<b>B</b>	24 VDC OUT 6pt source 0.5A OCP
	STB DAO 8210	<b>S</b>	115/230 VAC OUT 2pt 2A
	STB DRA 3290	<b>S</b>	RELAY OUT 2pt form A/B 7A 24V coil
	STB DRC 3210	<b>S</b>	RELAY OUT 2pt form C 2A 24V coil
<b>Analog Input Modules</b>	STB AVI 1255	<b>B</b>	Analog V IN 2ch sgl-end 10bit 0...10V
	STB AVI 1270	<b>S</b>	Analog V IN 2ch sgl-end 12bit +/- 10V
	STB AVI 1275	<b>B</b>	Analog V IN 2ch sgl-end 9bit +/- 10V
	STB AVI 1225	<b>B</b>	Analog C IN 2ch sgl-end 10bit 4...20mA
	STB ACI 1230	<b>S</b>	Analog C IN 2ch 12bit sgl-end 0...20mA
	STB ART 0200	<b>S</b>	Analog IN 2ch 16bit iso RTD/TC/mV
<b>Analog Output Modules</b>	STB AVO 1250	<b>S</b>	Analog V OUT 2ch sgl end 12bit +10V
	STB AVO 1255	<b>B</b>	Analog V OUT 2ch sgl end 10bit 0...10V
	STB ACO 1210	<b>S</b>	Analog C OUT 2ch 12bit 0...20mA
	STB ACO 1225	<b>B</b>	Analog C OUT 2ch 10bit 4...20mA
	STB AVO 1265	<b>B</b>	Analog V OUT 2ch sgl end 9bit +/- 10V
<b>Expert Modules</b>	STB EPI 1145	<b>S</b>	Tego Power 16in/8out interface
	STB EPI 2145	<b>S</b>	TeSys Model U 12in/8out prewiring interface
	STB EHC 3020	<b>S</b>	High speed counter 1 channel



Network Interface Modules		
<b>Profibus DP</b>	STB NDP 1010	<b>B</b>
	STB NDP 2212	<b>S</b>
<b>INTERBUS</b>	STB NIB1010	<b>B</b>
	STB NIB 2212	<b>S</b>
<b>CANopen</b>	STB NCO 1010	<b>B</b>
	STB NCO 2212	<b>S</b>
<b>DeviceNet</b>	STB NDN 1010	<b>B</b>
	STB NDN 2212	<b>S</b>
<b>Ethernet MB TCP/IP</b>	STB NIP 2212	<b>S</b>
<b>Modbus Plus</b>	STB NMP 2212	<b>S</b>
<b>Fipio</b>	STB NFP 2212	<b>S</b>



### Power Distribution/ Extension Modules

	Product Number	Feature	Description
<b>Power Distribution</b>	STB PDT 3100	<b>S</b>	24VDC PDM
	STB PDT 3105	<b>B</b>	24VDC PDM single field power bus, no LEDs
	STB PDT 2100	<b>S</b>	115/230 VAC PDM
	STB PDT 2105	<b>B</b>	115/230 VAC PDM single field power bus, no LEDs
<b>Extension Modules</b>	STB XBE 1200		BOS Extension Module
	STB XBE 1000		EOS Extension Module
	STB XBE 2100		CANopen Extension Module



### Bases

<b>I/O Bases</b>	STB XBA 1000	I/O Base size 1, 13.9 mm
	STB XBA 2000	I/O Base size 2, 18.4 mm
	STB XBA 3000	I/O Base size 3, 27.8 mm
<b>Other Bases</b>	STB XBA 2200	PDM Base 18.4 mm
	STB XBA 2400	EOS Extension Base 18.4 mm
	STB XBA 2300	BOS Extension Base 18.4 mm

### Configuration Software

STB SPU 1000	Configuration Software w/cable
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### Connector Kits

STB XTS 1100	6pt I/O Screw Connector Kit (qty 20)
STB XTS 2100	6pt I/O Spring Connector Kit (qty 20)
STB XTS 1110	5pt I/O Screw Connector Kit (qty 20)
STB XTS 2110	5pt I/O Spring Connector Kit (qty 20)
STB XTS 1120	2pt I/O Screw Connector Kit (qty 10)
STB XTS 2120	2pt I/O Spring Connector Kit (qty 10)
STB XTS 1130	2pt PDM Screw Connector Kit (qty 10)
STB XTS 2130	2pt PDM Spring Connector Kit (qty 10)
STB XTS 1111	5pt DeviceNet Screw Connector
STB XTS 2111	5pt DeviceNet Spring Connector
STB XTS 2150	High Speed Counter Connector

### Accessories

STB XMP 1100	Termination Plate (spare)
STB XMP 4440	Memory Card 32K
STB XMP 6700	Marking Label Sheet (pack of 50)
STB XCA 1001	0.3m Bus Extension Cable
STB XCA 1002	1.0m Bus Extension Cable
STB XCA 1003	4.5m Bus Extension Cable
STB XCA 1004	10m Bus Extension Cable
STB XCA 1006	14m Bus Extension Cable
STB XMP 7700	Module Keying Pin Kit (qty 60)

(Some accessories not shown — see product catalog for complete listing.)

# The efficiency of Telemecanique branded *solutions*

Used in combination, Telemecanique products provide quality solutions, meeting all your **Automation & Control** applications requirements.

## Benefits at a glance

### Smart

Built-in intelligence and thoughtful, comprehensive system software make Advantys easy to design, configure, and maintain.

### Flexible

The granular, modular design and wide range of I/O modules, network interfaces, and options let you design a system that is exactly right for your needs.

### Open

Advantys STB can interface with most major fieldbuses, and the CANopen non-proprietary bus makes Advantys the perfect device integration I/O solution.

### Simple

Removable, snap-in wiring connectors speed up and simplify commissioning, and removable memory cards let you duplicate island bus configurations in seconds.



## A worldwide presence

### Constantly available

- More than 5,000 points of sale in 130 countries.
- You can be sure to find the range of products that are right for you and which complies fully with the standards in the country where they are used.

### Technical assistance wherever you are

- Our technicians are at your disposal to assist you in finding the optimum solution for your particular needs.
- Schneider Electric provides you with all necessary technical assistance, throughout the world.



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