

# Product data sheet

Specifications



analog input kit, Modicon STB,  
standard, +/- 10V, 4 I, 15bits with  
sign

STBAVI0300K

## Main

Range Of Product	Modicon STB distributed I/O solution
Product Or Component Type	Standard analog input kit
Kit Composition	STBAVI0300 module STBXTS1100, 6-terminal screw type connector STBXTS2100, 6-terminal spring clamp connector STBXBA1000 base
Analogue Input Type	Voltage +/- 10 V Voltage +/- 5 V Voltage 0...10 V Voltage 0...5 V Voltage 1...5 V
Analogue Input Number	4
Analogue Input Resolution	15 bits + sign
Type Of Filter	Single low pass input filter 25 Hz

## Complementary

Absolute Maximum Input	50 V DC
Cold Swapping	Yes
Hot Swapping Fallback	Yes for standard NIMs
Fallback Status	State 0 basic NIMs User configurable standard NIMs
Data Format	EN 61131-2 IEC 61131-2
Integral Linearity	+/- 0.2 %FS
Differential Linearity	Monotonic
Input Impedance	400 kOhm
Maximum Supply Current For Sensors	100 mA per input channels
Maximum Source Impedance	1 kOhm
Absolute Accuracy Error	+/- 0.75 % of full scale 25 °C
Temperature Drift	+/-0.01 %/°C
Insulation Between Channels And Logic Bus	1500 V for 1 minute
Insulation Between Channels And Sensor Bus	30 V
Addressing Requirement	2 input words
Product Compatibility	Mounting base STBXBA1000 Power distribution module STBPDT3100/3105
[Us] Rated Supply Voltage	24 V DC

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Supply	Power distribution module
Current Consumption	90 mA at 5 V DC for logic bus
Marking	CE
Overvoltage Category	II
Status Led	1 LED (green) module status (RDY) 1 LED (red) module error (ERR)

## Environment

Product Certifications	FM Class 1 Division 2 UL CSA ATEX Cat 3G C-Tick
Pollution Degree	2 conforming to IEC 60664-1
Operating Altitude	<= 2000 m
Ip Degree Of Protection	IP20 conforming to IEC 61131-2 class 1
Ambient Air Temperature For Operation	-25...70 °C
Ambient Air Temperature For Operation	- 13...158 °F without derating
Ambient Air Temperature For Storage	-40...85 °C without derating
Ambient Air Temperature For Storage	-40...185 °F without derating
Relative Humidity	95 % at 60 °C without condensation
Vibration Resistance	+/-0.35 mm at 10...58 Hz 3 gn at 58...150 Hz on 35 x 7.5 mm symmetrical DIN rail 5 gn at 58...150 Hz on 35 x 15 mm symmetrical DIN rail
Shock Resistance	30 gn for 11 ms conforming to IEC 88 reference 2-27

## Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	3.0 cm
Package 1 Width	8.0 cm
Package 1 Length	13.0 cm
Package 1 Weight	149.0 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	28
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	4.598 kg
Unit Type Of Package 3	PAL
Number Of Units In Package 3	448
Package 3 Height	60.0 cm
Package 3 Width	80.0 cm
Package 3 Length	448.0 cm

Package 3 Weight	66.752 kg
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## Contractual warranty

Warranty	18 months
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# Sustainability

**Green Premium™ label** is Schneider Electric’s commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

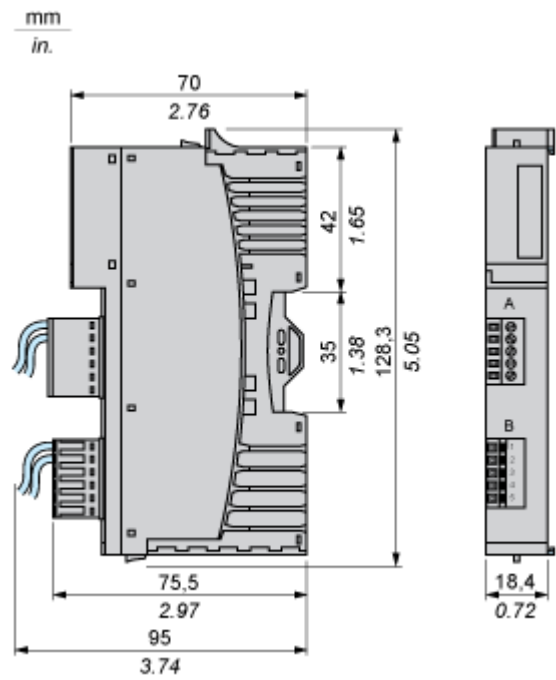
[Guide to assess a product’s sustainability >](#)

## Well-being performance

 Mercury Free	
 Rohs Exemption Information	<a href="#">Yes</a>
Reach Regulation	<a href="#">REACH Declaration</a>
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	<a href="#">China RoHS declaration</a>
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
California Proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="#">www.P65Warnings.ca.gov</a>

Dimensions Drawings

Dimensions

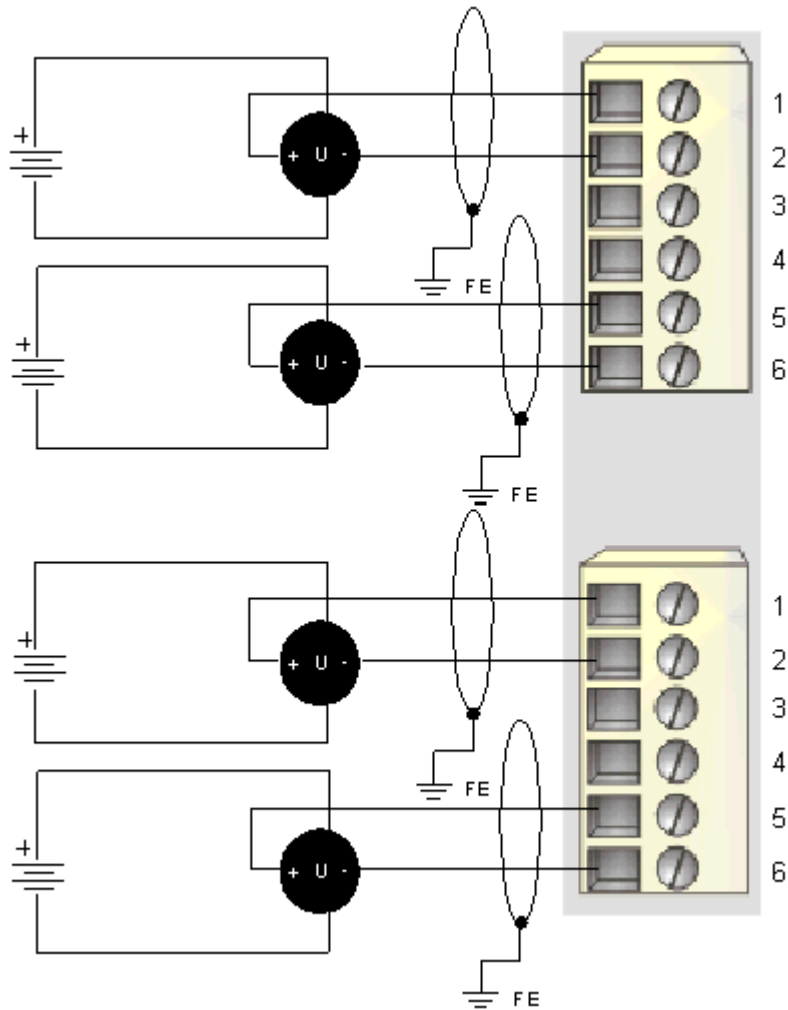


Connections and Schema

Wiring Diagram

Example

4 isolated analog sensors, external 24 VDC power supplies



Pin	Top Connections	Bottom Connections
1	voltage in 1+	voltage in 3+
2	voltage in 1 -	voltage in 3-
3	no connection	no connection
4	no connection	no connection
5	voltage in 2+	voltage in 4+
6	voltage in 2-	voltage in 4-