

# Product data sheet

Specifications



## standard digital input kit - Modicon STB - 230 V AC - 2 I

STBDAI7220K

**Product availability: Non-Stock - Not normally stocked in distribution facility**

### Main

|                             |  |
|-----------------------------|--|
| Range Of Product            | Modicon STB distributed I/O solution   |
| Product Or Component Type   | Standard digital input kit   |
| Kit Composition             | STBXTS1110, 5-terminal screw type connector<br>STBDAI7220 module<br>STBXTS2110, 5-terminal spring clamp connector<br>STBXBA2000 base |
| Discrete Input Number       | 2  |
| Discrete Input Voltage      | 230 V  |
| Discrete Input Voltage Type | AC   |

### Complementary

|   |  |
|---|--|
| Input Voltage Limits                      | 0...40 V at state 0<br>159...256 V at state 1  |
| Acceptable Input Voltage                  | 265 V  |
| Absolute Maximum Voltage                  | 400 V 20 ms  |
| Network Frequency                         | 50/60 Hz   |
| Network Frequency Limits                  | 47...63 Hz   |
| Current State 0 Guaranteed                | <= 2 mA  |
| Current State 1 Guaranteed                | >= 4 mA  |
| Response Time                             | 1.5 ms off-to-on<br>1.5 ms on-to-off   |
| Protection Type                           | Power protection integrated fuse on PDM time lag 10 A<br>Input protection resistor-limited |
| Insulation Between Channels And Logic Bus | 1780 V for 1 minute  |
| Cold Swapping                             | Yes  |
| Hot Swapping                              | Yes for standard NIMs  |
| Product Compatibility                     | Power distribution module STBPDT2100/2105<br>I/O base STBXBA2000                           |
| [Us] Rated Supply Voltage                 | 115/230 V AC   |
| Supply                                    | Power distribution module  |
| Current Consumption                       | 40 mA 5 V DC logic bus   |
| Marking                                   | CE   |
| Overvoltage Category                      | II   |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

|            |  |
|------------|--|
| Status Led | 1 LED (Green) module status (RDY)<br>1 LED per channel (Green) channel status (IN1 to IN2)<br>1 LED (Red) module error (ERR) |
| Depth      | 2.56 in (65.1 mm)  |
| Height     | 0.72 in (18.4 mm)  |
| Width      | 4.92 in (125 mm)   |
| Net Weight | 0.27 lb(US) (0.122 kg)   |

## Environment

|                                       |  |
|---------------------------------------|--|
| Standards                             | EN/IEC 61131-2 type 1  |
| Product Certifications                | CSA<br>UL<br>FM Class 1 Division 2   |
| Pollution Degree                      | 2 IEC 60664-1  |
| Operating Altitude                    | <= 6561.68 ft (2000 m)   |
| Ip Degree Of Protection               | IP20 conforming to IEC 61131-2 class 1   |
| Ambient Air Temperature For Operation | 32...140 °F (0...60 °C) without derating)  |
| Ambient Air Temperature For Operation | 32...140 °F without derating   |
| Ambient Air Temperature For Storage   | -40...185 °F (-40...85 °C) without derating  |
| Ambient Air Temperature For Storage   | -40...185 °F without derating  |
| Relative Humidity                     | 95 % 140 °F (60 °C) without condensation   |
| Vibration Resistance                  | 3 gn 58...150 Hz 35 x 7.5 mm symmetrical DIN rail<br>5 gn 58...150 Hz 35 x 15 mm symmetrical DIN rail<br>+/-0.35 mm 10...58 Hz |
| Shock Resistance                      | 30 gn 11 ms IEC 88 reference 2-27  |

## Ordering and shipping details

|                   |               |
|-------------------|---------------|
| Category          | US1PC3218215  |
| Discount Schedule | PC32          |
| Gtin              | 3595863991130 |
| Returnability     | No            |
| Country Of Origin | US            |

## Packing Units

|                              |                    |
|------------------------------|--------------------|
| Unit Type Of Package 1       | PCE                |
| Number Of Units In Package 1 | 1                  |
| Package 1 Height             | 1.06 in (2.7 cm)   |
| Package 1 Width              | 3.15 in (8.0 cm)   |
| Package 1 Length             | 5.12 in (13.0 cm)  |
| Package 1 Weight             | 4.90 oz (139.0 g)  |
| Unit Type Of Package 2       | S02                |
| Number Of Units In Package 2 | 28                 |
| Package 2 Height             | 5.91 in (15.0 cm)  |
| Package 2 Width              | 11.81 in (30.0 cm) |

|                              |                           |
|------------------------------|---------------------------|
| Package 2 Length             | 15.75 in (40.0 cm)        |
| Package 2 Weight             | 9.52 lb(US) (4.318 kg)    |
| Unit Type Of Package 3       | PAL                       |
| Number Of Units In Package 3 | 448                       |
| Package 3 Height             | 23.62 in (60.0 cm)        |
| Package 3 Width              | 31.50 in (80.0 cm)        |
| Package 3 Length             | 176.38 in (448.0 cm)      |
| Package 3 Weight             | 137.29 lb(US) (62.272 kg) |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

## 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 >](#)

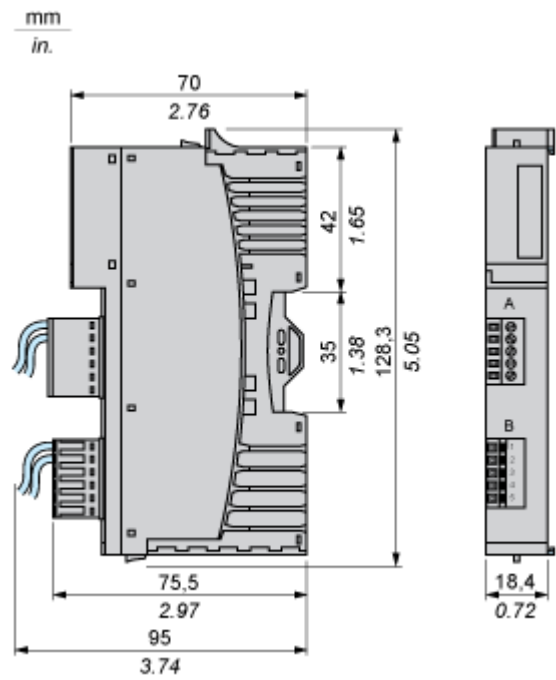
[Guide to assess a product’s sustainability >](#)

## 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="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

Dimensions Drawings

Dimensions

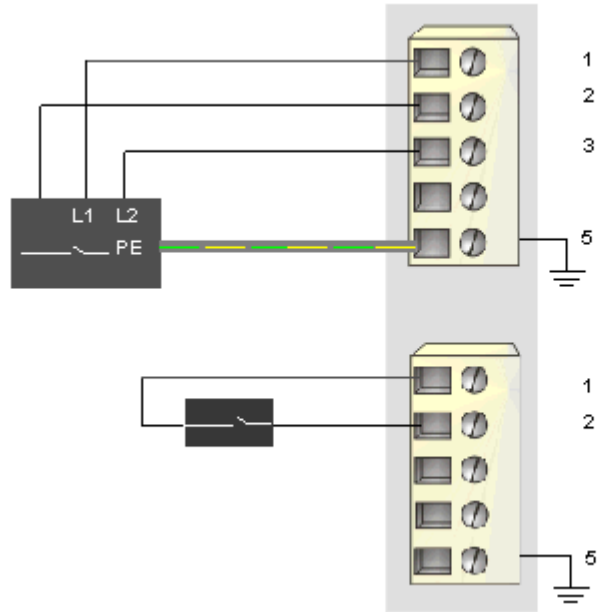


Connections and Schema

Wiring Diagram

Example

1 three-wire sensor and 1 two-wire sensor



| Pin | Top Connector                             | Bottom Connector                          |
|-----|---|---|
| 1   | 230 VAC sensor bus power (L1)             | 230 VAC sensor bus power (L1)             |
| 2   | input from sensor 1                       | input from sensor 2                       |
| 3   | field power neutral or L2 (to the module) | field power neutral or L2 (to the module) |
| 4   | field power neutral or L2 (to the module) | field power neutral or L2 (to the module) |
| 5   | protective earth                          | protective earth                          |