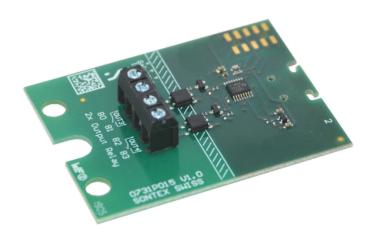


# Digital Modules

Retrofitable digital Input Module and Output Module for the SC5 Calculator







#### **Retrofitable Input Module**

## **Application**

With the optional digital input module, pulse or static additional input signals can be read by the Supercal 5 calculator. This allows the Supercal 5 to interact with other devices.

Up to two optional input modules can be operated simultaneously in the Supercal 5. The module is powered by the Supercal 5 and each input can be configured individually (pulse or state) with the software Superprog Windows.

#### **Features**

- The Supercal 5 calculator can be equipped with maximally two optional modules. The calculator recognizes each installed module automatically.
- The input module is a plug-in unit and consists of a printed circuit board with two connecting terminals as well as cable strain relief and is supplied with a fixing screw.

#### **Installation**

In combination with a digital input module, the Supercal 5 requires mains supply. Each input of the module can be programmed separately either as pulse or state input. The maximal input voltage is 30 VDC.

To mount the digital input module, the upper part must be removed. This requires the removal of the user seals. The installation must be carried out by an authorized person. Electric basic protection must be ensured via the house installation.

The wiring must be carried out according to the wiring diagram in the datasheet. Secure the cables with the strain relief. Pull the cables through the cable sleeves of the Supercal 5. We recommend twisting the connections and providing them with cable lugs. This prevents the danger of short circuits.

The inputs are programmable as state or pulses with the Superprog Windows configuration software.

#### **Operating**

Superprog Windows supports the initial setup of the module and its customization.

Further information on the operation of the software and installation is stored under the path "Help", "User manual" and "Help", "Error description".

The Supercal 5 calculator automatically detects the inserted optional communication modules, then the module is already up and running.

## Safety references

In order to minimize dangers from electrostatic discharges, before you touch the printed circuit board, you should touch a grounded part (e.g. a heating pipe). When connecting you should pay attention to the correct order of the connecting cable. The wires are not exchangeable. The mounting is to be made considering the enclosed installation instruction.

#### **Operation maintenance**

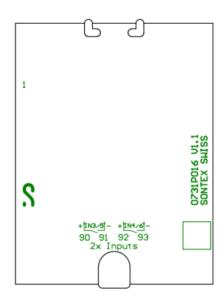
Calibration relevant safety seal as well as the user seals may not be damaged or removed. Otherwise the warranty of the equipment is void. User seals may only be removed by authorized persons for service purposes and to be afterwards renewed.



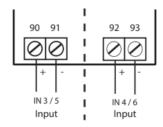
#### **Technical Data**

Designation	Description
2 Pulses or State (Static) Inputs	
Maximal input voltage	30 VDC
Inputs (by default)	inactive

## **Connections / dimensions**



Dimensions: 50 x 66.2 mm



## **Retrofitable Relay Output Module**

## **Application**

With the optional relay output module, pulse or static additional input signals can be read by the Supercal 5 calculator. This allows the Supercal 5 to interact with other devices.

Up to two optional input modules can be operated simultaneously in the Supercal 5. The module is powered by the Supercal 5 and each input can be configured individually (pulse or state) with the software Superprog Windows.



#### **Features**

- The Supercal 5 calculator can be equipped with maximally two optional modules. The calculator recognizes each installed module automatically.
- The relay output module is a plug-in unit and consists of a printed circuit board with two connecting terminals as well as cable strain relief and is supplied with a fixing screw.

#### **Installation**

In combination with a relay output module, the Supercal 5 requires a mains supply. Each input of the module can be programmed separately either as pulse or state outputs. The maximal switching voltage is 60 VAC/DC and the maximal switching current is 0,5 A.

To mount the relay output module, the front housing must be removed. This requires the removal of the user seals. The installation must be carried out by an authorised person. Electric basic protection must be ensured via the house installation.

The wiring must be carried out according to the wiring diagram in the datasheet. Secure the cables with the strain relief. Pull the cables through the cable sleeves of the Supercal 5. We recommend twisting the connections and providing them with cable lugs. This prevents the danger of short circuits.

The outputs are programmable as state or pulses with the Superprog Windows configuration software.

### **Operating**

Superprog Windows supports the initial setup of the module and its customization.

Further information on the operation of the software and installation is stored under the path "Help", "User manual" and "Help", "Error description".

The Supercal 5 calculator automatically detects the inserted optional communication modules, then the module is already up and running.

#### Safety references

In order to minimize dangers from electrostatic discharges, before you touch the printed circuit board, you should touch a grounded part (e.g. a heating pipe). When connecting you should pay attention to the correct order of the connecting cable. The wires are not exchangeable. The mounting is to be made considering the enclosed installation instruction.

#### **Operation maintenance**

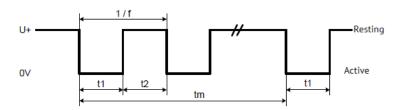
Calibration relevant safety seal as well as the user seals may not be damaged or removed. Otherwise the warranty of the equipment is void. User seals may only be removed by authorized persons for service purposes and to be afterwards renewed.

#### **Technical Data**



Designation	Description	
2 Pulses or State (Static Outputs)		
Maximal switching voltage	60 VAC/VDC	
Maximal switching current	0.5 A	
Outputs (by default)	inactive	

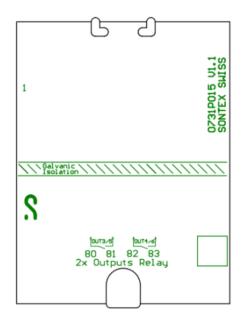
## **Electrical Pulse Diagram**



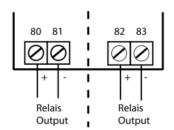
Designation	Description
Normal mode:	t1=t2min. 100ms (with duty cycle=50%)
Fast mode (mains operation):	t1=t2min. 2.5ms (with duty cycle=50%)
Vin max.	<30V inactive, 0.5V active
Vin min.	2.0V inactive, 0V active
Iin max.	26μA inactive, <100μA active
Iin min.	0μA inactive, 1.4μA active



## **Connections / dimensions**



Dimensions: 50 x 66.2 mm



## **CE Conformity**

according to Directive MID 2014/32/EU according to RED 2014/53/EU

## **Technical Support**

For technical support, please contact your local Sontex representative or Sontex SA directly.

Specifications are subject to change without notice.



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