

# SC420TWHL

## mA and Voltage Input Isolating Terminals



- **Replace Standard DIN-Rail Terminals**
- **RFI Protection, Input Isolation**
- **Voltage or Current Inputs**
- **Simple 2 Wire 4-20mA Output**
- **Loop Powered Output Gives High Noise Immunity**
- **Low Cost Solution**

### Input Options

The range of inputs for the SC420TWHL are as follows:-

Standard Ranges are 4-20mA, 0-20mA, 0-10V and 1-5V.

But the unit can cover the following ranges:-

| Input Types | Input Range MIN | Input Range MAX |
|-------------|-----------------|-----------------|
| DC Current  | 0 - 100µA       | 0 - 5 A         |
| DC Voltage  | 0 - 100mV       | 0 - 100 V       |

The SC420TWHL series of isolating terminal blocks can replace standard DIN-Rail terminal to provide input isolation, signal conversion and excellent RFI and noise rejection

The units are powered from the output side, making them ideal for plc and data acquisition applications.

Inputs for the SC420TWHL include mA or Voltage and other units are available with thermocouple, mV or RTD inputs. The standard output is 4-20mA.

The SC420TWHL units are housed in ultra-compact DIN-rail mounted enclosures just 18mm wide.

### Technical Specifications

| Parameter                 | Min   | Typ                                 | Max       | Comments                     |
|---------------------------|-------|-------------------------------------|-----------|------------------------------|
| Supply Voltage            | 10V   | 24V                                 | 32V       | Powered from Output Side     |
| Input Current             | 0mA   | 0-20mA                              | 30mA      |                              |
| Full Scale Volt Drop      |       | 0.2V                                | 0.3V      | On Input Side (20mA Input)   |
| Input Impedance (Volt In) |       | 1MΩ                                 |           | Voltage Input                |
| Input Impedance (mA In)   |       | 10MΩ                                |           | mA Input                     |
| Output Linearity Error    |       | ±0.1%                               |           |                              |
| Temp Coefficient          |       |                                     | 100ppm/°C |                              |
| Load Resistance Error     |       |                                     | ±5ppm/Ω   | 0 < RL < 600Ω                |
| Time Constant (10-90%)    |       | 30ms                                |           | 300ms for Thermocouple Input |
| Operating Ambient         | -15°C |                                     | 70°C      |                              |
| Relative Humidity         | 0%    |                                     | 90%       |                              |
| Isolation Voltage         |       | 1kV                                 |           |                              |
| Surge Voltage             |       | 2.5kV for 50µs Transient of 10kV/µs |           |                              |

### Notes

Absolute maximum ratings indicate sustained limits beyond which damage to the device may occur. Device is protected against reverse polarity connection.

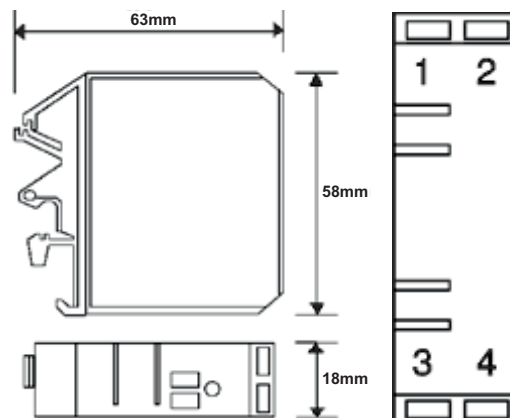
Accuracy figures based on 0-20mA input, 250Ω load resistance, and an ambient temperature of 20°C.

### Installation Data

|                      |                                 |
|----------------------|---------------------------------|
| Mounting             | DIN Rail TS35                   |
| Orientation          | Any                             |
| Connections          | Screw Clamp with pressure plate |
| Conductor Size       | 0.5-4.0mm                       |
| Insulation Stripping | 12mm                            |
| Weight               | Approx 50g                      |

### Ordering Information

Part No.: SC420TWHL 4-20mA In 4-20mA Out



### Connection Details

1. Output Channel +ve
2. Output Channel -ve
3. Input Channel +ve
4. Input Channel -ve

Cynergy3 Components Ltd.  
7 Cobham Road  
Ferndown Industrial Estate  
Wimborne, Dorset BH21 7PE  
Telephone +44 (0) 1202 897969  
Email:sales@cynergy3.com

ISO9001 CERTIFIED

SC420TWHL 2017

© 2017 Cynergy3 Components, All Rights Reserved. Specifications are subject to change without prior notice. Cynergy3 Components and the Cynergy3 Components logo are trademarks of Cynergy3 Components Limited.



Made in the UK

www.cynergy3.com

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [I/O Modules](#) category:*

*Click to view products by [Sensata](#) manufacturer:*

Other Similar products are found below :

[70L-IDC5S](#) [70L-OAC-L](#) [70Z3289-4](#) [G21960000700](#) [G21960002700](#) [G34960002700](#) [OACU](#) [C4SWOUT](#) [PB16H](#) [G34960001700](#) [G3TA-OA101SZ-1](#) [DC24](#) [G77-S](#) [5607189](#) [DA5](#) [ODC-24A](#) [IDC5P](#) [FC6A-N16B1](#) [6421](#) [FC6A-N32B3](#) [70MRCQ32-HL](#) [G3TAOD201SDC24](#) [C200H-LK201-V1](#) [G3TA-OA202SZ-US](#) [DC12](#) [GT1-OD16](#) [GT1-AD04CST](#) [B7AM-6BS](#) [70GRCQ24-HS](#) [6422](#) [84110410](#) [GT1-OD16MX](#) [G7VC-OC16-B7](#) [70MRCK24-DIN](#) [6202](#) [6402](#) [FC6A-J2C1](#) [FC6A-KC1C](#) [FC6A-R081](#) [FC6A-J8CU1](#) [GP32900003700](#) [641-480-5022](#) [PB16H](#) [84145010](#) [84110210](#) [FRUSB1601](#) [PCL-720+-BE](#) [FRRJ451601](#) [AP24MX3DB25F](#) [ADAM-5053S-AE](#) [WISE-S614-A](#) [ADAM-5051S-AE](#)