



Technische Alternative RT GmbH

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IS-DL

Vers. 1.00 EN

Current sensor with integral current converter



This sensor can be used to measure the **effective current (RMS)** of any consumer up to 16 A alternating current.

For high starting currents, a pulse load of up to 100 A is permissible.

A current converter is located inside the enclosure. The supply cable for the system component to be measured is looped through here.

A microprocessor converts the analogue measurement values into a serial digital signal suitable for the DL bus (data link).

DL bus (address, index)

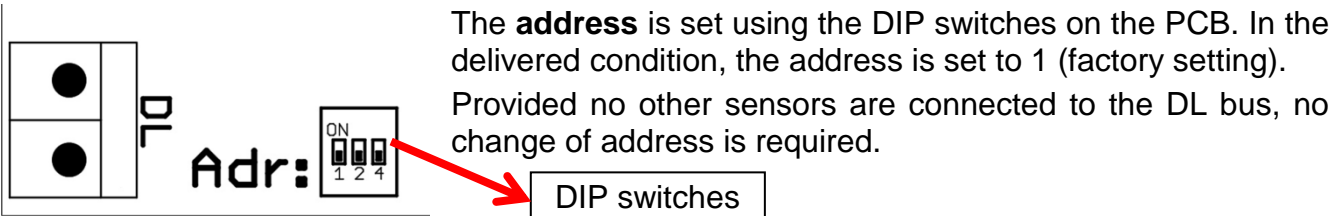
The sensor is supplied with power from the DL bus (data link) and returns the relevant measurement to the controller upon request.

Suitable controllers:

UVR1611 from version A3.00 and serial number 13286, but only practical in the ampere range (index 2)

UVR16x2 and all CAN bus devices with X2 and DL connection

The request is made up of the **address** of the sensor and **index** of the measurement.



The effective address is derived from address 1 (= factory setting) plus the sum of all the values of the selected DIP switch settings.

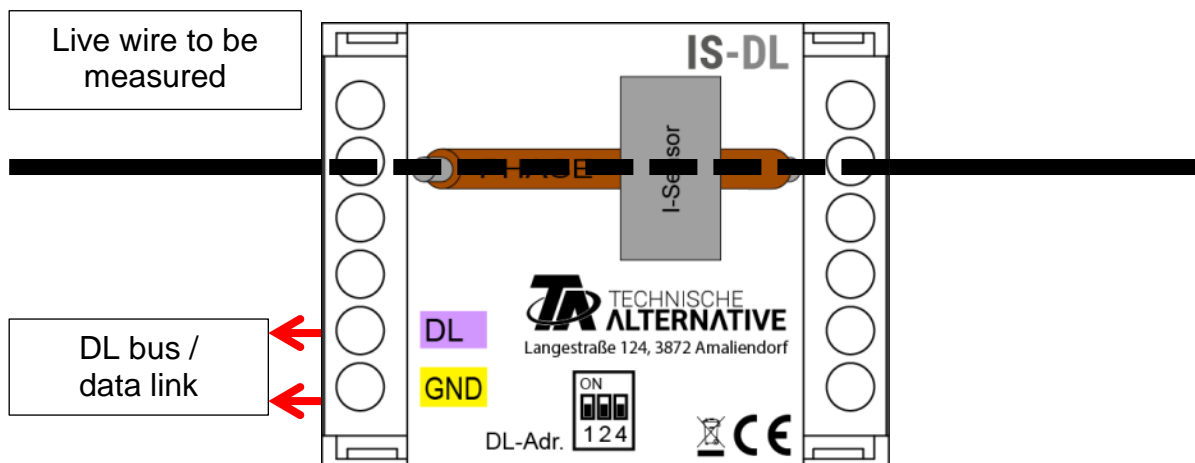
Example: Required address 6 = 1 (from factory setting) + 1 + 4
 = DIP switches 1 and 4 must be set to **ON**.

The **index** of the measurement is fixed:

Index	Measurement	Measuring range
1	Current [0.1 mA]	10 mA 3200 mA
2	Current [0.1 A]	0.1 A 16.0 A

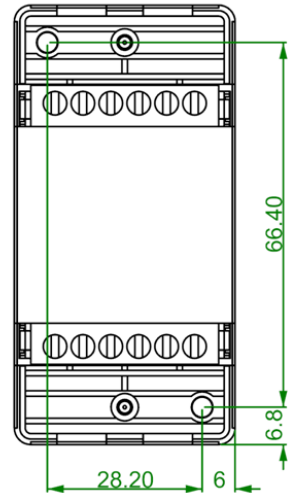
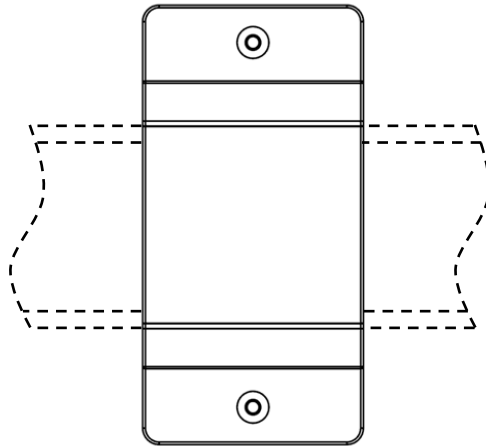
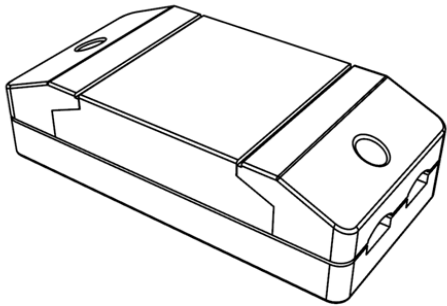
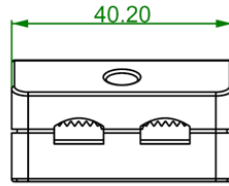
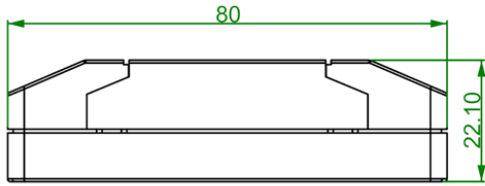
UVR16x2 and devices with X2 technology: The measurements are programmed as DL inputs in the "DL bus" menu.

Connection, installation and technical data



The polarity of the **DL bus** connections is **reversible**; there is no required polarity to be observed.

Dimensions in mm



Top-hat rail installation
(support rail TS35 to
standard EN 50022)

Technical data	
Index 1 [mA]	
Measuring range	10 mA 3200 mA
Resolution	0.1 mA
Accuracy	± 10 mA
Index 2 [A]	
Measuring range	0.1 A 16.0 A
Resolution	0.1 A
Accuracy	± 0.1 A
DL bus load	19 %
IP rating	IP 40
Max. ambient temperature for the measurement amplifier	45 °C

EU Declaration of conformity

Document- Nr. / Date: TA17064 / 02/02/2017
Company / Manufacturer: Technische Alternative RT GmbH
Address: A- 3872 Amaliendorf, Langestraße 124

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Product name: IS-DL
Product brand: Technische Alternative RT GmbH
Product description: Current sensor with integral current converter

The object of the declaration described above is in conformity with Directives:

2014/35/EU Low voltage standard
2014/30/EU Electromagnetic compatibility
2011/65/EU RoHS Restriction of the use of certain hazardous substances

Employed standards:

EN 60730-1: 2011 Automatic electrical controls for household and similar use –
Part 1: General requirements
EN 61000-6-3: 2007 Electromagnetic compatibility (EMC) - Part 6-3: Generic standards -
+A1: 2011 Emission standard for residential, commercial and light-industrial
+ AC2012 environments
EN 61000-6-2: 2005 Electromagnetic compatibility (EMC) - Part 6-2: Generic standards -
+ AC2005 Immunity for industrial environments
EN 50581: 2012 Technical documentation for the assessment of electrical and electronic
products with respect to the restriction of hazardous substances

Position of CE - label: On packaging, manual and type label



Issuer: Technische Alternative RT GmbH
A- 3872 Amaliendorf, Langestraße 124

This declaration is submitted by

A handwritten signature in black ink, appearing to read 'Schneider Andreas'. The signature is written in a cursive style.

Dipl.-Ing. Andreas Schneider, General manager,
02/02/2017

This declaration certifies the agreement with the named standards, contains however no warranty of characteristics.

The security advices of included product documents are to be considered.