Complete 4-channel system interface unit for ultra-stable, high precision fluxgate technology DS series current transducers.

Powers up to 4 x DS50 to DS2000 at the same time.

Features

- Compact 19" rack mount 1U height
- Current transducers’ output signals (current or voltage) available via 4mm banana plugs
- Front LEDs indication of normal operation for each transducer and power LED for DSSIU-4-1U
- Universal autorange (100-240V AC 50/60Hz) AC input voltage or 120–370V DC input voltage.
Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Symbol</th>
<th>Unit</th>
<th>Min</th>
<th>Typ.</th>
<th>Max</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mains input</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC input voltage</td>
<td>V&lt;sub&gt;AC&lt;/sub&gt;</td>
<td>V&lt;sub&gt;rms&lt;/sub&gt;</td>
<td>85</td>
<td></td>
<td>264</td>
<td>Autoranging</td>
</tr>
<tr>
<td>AC nominal current</td>
<td>I&lt;sub&gt;AC&lt;/sub&gt;</td>
<td>I&lt;sub&gt;rms&lt;/sub&gt;</td>
<td></td>
<td>1.6A @ 115V</td>
<td>0.7A @ 230V</td>
<td>Full scale operation with 4 DS2000 and 3000A primary</td>
</tr>
<tr>
<td>Frequency</td>
<td>f</td>
<td>Hz</td>
<td>47</td>
<td></td>
<td>63</td>
<td>Autoranging</td>
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<tr>
<td>Transducer output port</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply voltage</td>
<td>U&lt;sub&gt;cc&lt;/sub&gt;</td>
<td>mV&lt;sub&gt;rms&lt;/sub&gt;</td>
<td>±14.7</td>
<td></td>
<td>±15.75</td>
<td>x4 channels</td>
</tr>
<tr>
<td>Ripple</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td></td>
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<tr>
<td>Environment and Mechanical</td>
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<tr>
<td>Ambient operating temperature range</td>
<td>T&lt;sub&gt;a&lt;/sub&gt;</td>
<td>°C</td>
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<td>40</td>
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<tr>
<td>Storage temperature range</td>
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<td>85</td>
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<tr>
<td>Relative humidity</td>
<td>%</td>
<td></td>
<td>20</td>
<td></td>
<td>80</td>
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<tr>
<td>Mass</td>
<td>Kg</td>
<td></td>
<td>4.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size (W x H x D)</td>
<td>mm</td>
<td></td>
<td>483 x 44 x 271</td>
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</tr>
</tbody>
</table>

Channel configuration
Each channel does have 3 connectors.
- Transducer (DSUB9) for connection to the transducer
- RED + (4mm Banana) is positive output from the measured current
- BLACK - (4mm Banana) is negative output from the measured current

Current output configuration
The DSSIU-4-1U will send the measured current to the RED and BLACK 4mm banana jacks.
RED being connected to pin 6 on the transducer.
BLACK being connected to pin 1 on the transducer.

Maximum power with temperature
DSSIU-4-1U can provide power to 4xDS2000 with a primary current of 3000A DC @ 40°C ambient.
DSSIU-4-1U can provide power to 2xDS2000 with a primary current of 3000A DC @ 50°C ambient.
The number of smaller transducers are not impacting the maximum power.
Mechanical Dimensions

- **Back**
  - Dimensions: 270.50 mm, 44.00 mm, 482.60 mm

- **Front**
  - Dimensions: 482.60 mm, 44.00 mm, 270.50 mm

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DSSIU-4-1U
Intended use:

The DSSIU-4-1U is intended to be used for powering up to four Danisense current sensors. The sensors which can be powered are all 200A, 600A, 900A and 2000A transducers.

Instruction for use:

1. Do not power up the device before all cables are connected
2. If the DSSIU-4-1U is intended for desk use, mount the rubber feet which are part of the package. If the DSSIU-4-1U is intended for Rack mounting, use the screw kit for mounting and do not mount the rubber feet.
3. Connect a DSUB cable between DSSIU-4-1U and each sensor
4. Connect a low impedance amperemeter, measuring resistor or power analyzer on the secondary output (4mm red and black connectors)
5. Ensure that no calibration connectors are attached when measuring primary current. Always avoid to create a calibration short circuit, between + and — calibration connection.

When all connection are secured - connect mains power

Indications:

When mains is applied a green light diode on the front under the power symbol will light green.

For each sensor channel connected a green light diode will light on the front if the connection is correct and the sensor is operating within normal range.

Safety Instructions:

DO NOT TRY TO DISASSEMBLE THE UNIT.
Make sure that the unit is properly connected to earth ground.
Do not block the ventilation openings on the side panels.
If the fan does not operate properly contact Danisense for repair.
If the “POWER” green diode is not operating when mains is applied, disconnect power and contact Danisense for further instruction.

CE Statement:

This product has been tested and found to comply with the following standards.
Electrical safety: EN 61010-1 2010
Electromagnetic Compatibility: EN 61326-1 2013