

# **OC35-SG STRAIN GAUGE TRANSMITTER**

**OWNER'S MANUAL**

**ORBIT CONTROLS AG**  
Zürcherstrasse 137  
CH-8952 Schlieren/ZH  
**Tel: + 41 44 730 2753**  
**Fax: + 41 44 730 2783**

info@orbitcontrols.ch  
www.orbitcontrols.ch



## Vor dem Einschalten

Überzeugen Sie sich, ob Ihre Sendung das richtige Gerät Orbit Controls Modell OC 35-SG beinhaltet, einschliesslich einer Betriebsanleitung OC 35-SG.

Vor dem Einschalten des Gerätes überprüfen Sie die Anschlüsse und die Versorgungsspannung. Ein falsch angeschlossenes Gerät kann beschädigt werden und damit auch die mitverbundene Folgeelektronik. Für falsche Handhabung wird jede Haftung abgelehnt.

### ZU BEACHTEN

Dieses Gerät wurde sorgfältig verpackt. Falls es bei Ihnen in beschädigtem Zustand eintrifft, benachrichtigen Sie unverzüglich den Orbit Controls Kundendienst (Tel: +41 44 730 2753 oder Fax: +41 44 730 2783) und nehmen Sie einen Schadenrapport auf, welchen Sie auch von der Transportgesellschaft unterschreiben lassen. Bewahren Sie bitte das Verpackungsmaterial für eventuelle Reklamationen auf.

## Unpacking Instructions

Remove the Packing List and verify that you have received all equipment, including the following:

Orbit Controls Model OC 35-SG.

Operator's Manual OC 35-SG.

If you have any questions about the shipment, please call the Orbit Controls Customer Service Department.

### NOTE

*When you receive the shipment, inspect the container and equipment for signs of damage. Note any evidence of rough handling in transit. Immediately report any damage to the Orbit Controls customer service, Phone +4144 730 2753 or Fax +4144 730 2783 and to the shipping agent.*

*The carrier will not honour damage claims unless all shipping material is saved for inspection. After examining and removing contents, save packing material and carton in event the reshipment is necessary.*

# Transmitter for Strain Gauges OC35-SG

- ✓ 1mV/V or 2mV/V selectable
- ✓ 150 Ohm or 350 Ohm Bridges
- ✓ 5V or 10V Excitation selectable
- ✓ Zero and Full Scale adjustable
- ✓ Analogue Output 0-10V isolated
- ✓ Analogue Output 4-20mA isolated
- ✓ Supply 24VDC
- ✓ For 35 mm DIN Rails



**OC35-SG** is a Transmitter for direct connection to Strain Gauge Bridges with four wire Terminals. The mV-Signal is converted into isolated process signal 0-10V or 4-20mA. The output signal is isolated by 250V r.m.s. from the input and from the supply.

Two potentiometers at the front permit small adjustments of Zero and Full Scale. The bridge sensitivity of 1mV/V or 2mV/V and the excitation of 5V or 10V are selectable with jumpers inside the instrument.

All external connections are via screw terminal at the front. OC35-SG is designed for 35mm DIN rail mount and supplied by 24VDC.

## SPECIFICATIONS

Input: 1mV/V or 2mV/V, internally selectable with jumpers.

Frequency Range: Low Pass Filter 0.1Hz.

Output: Voltage Output: 0 ... 10V isolated by 250V r.m.s.  
 Current Output: 4 - 20mA isolated by 250V r.m.s.  
 The LPF defines the response of the analogue output.

Accuracy:  $\pm 0.05\%$  from value plus  $\pm 0.05\%$  from range.

Tempco: Temperature Coefficient  $\pm 50$  ppm/ $^{\circ}$ C.

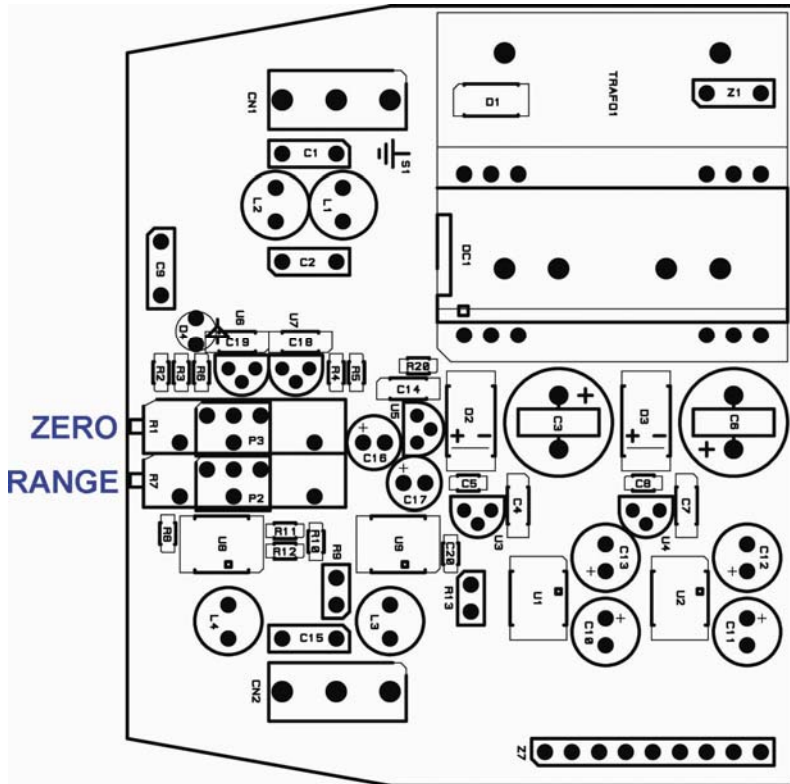
Adjustment: Potentiometer ZERO and RANGE at the front for 0V/4mA and 10V/20mA.  
 Adjustments: 0V/4mA  $\pm 10\%$   
 10V/20mA  $\pm 20\%$

Supply: 18-36VDC, 3W.

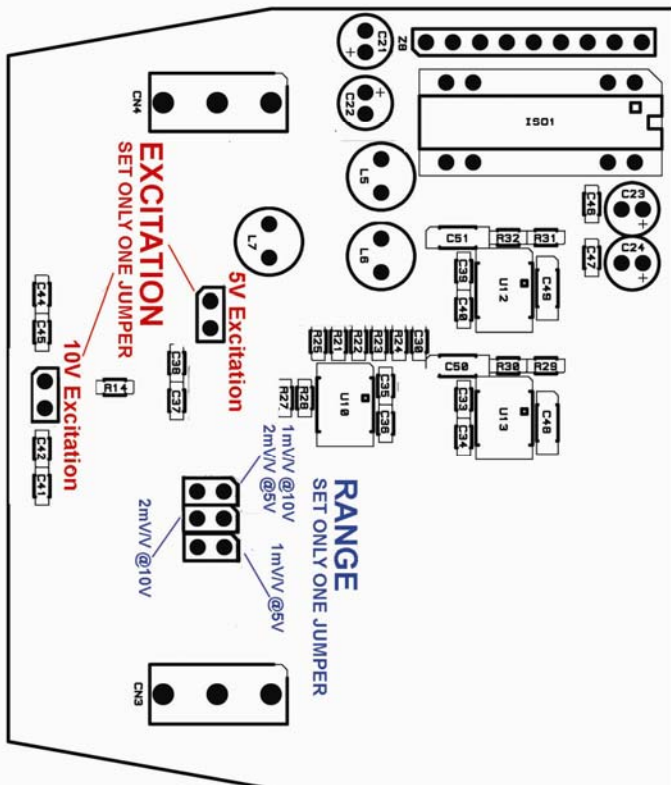
Cabinet: For 35mm DIN rails. Dimensions: 40 x 79 x 85 mm, 100 g.

Terminals: Screw Terminals

# RANGES and EXCITATION



**ZERO RANGE** 0V or 4mA  
10V or 20mA  
Adjustable with Potentiometers at the Front



**EXCITATION – Bridge Supply**  
One jumper only (5V or 10V) can be set at the time.

**RANGE**  
Four Ranges are available:  
- 1mV/V @ 5V  
- 1mV/V @ 10V and 2mV/V @ 5V  
- 2mV/V @ 10V  
One jumper only can be set at the time.

# RECOMMENDED CONNECTIONS

## IMMUNITY TEST

E.U.T.: OC35-SG  
Serial No.: 291123  
Supply: 24VDC  
Input: 2mV  
Output: 4 - 20 mA isolated

Technician: A. Moncada Zürich, 23.11.2009

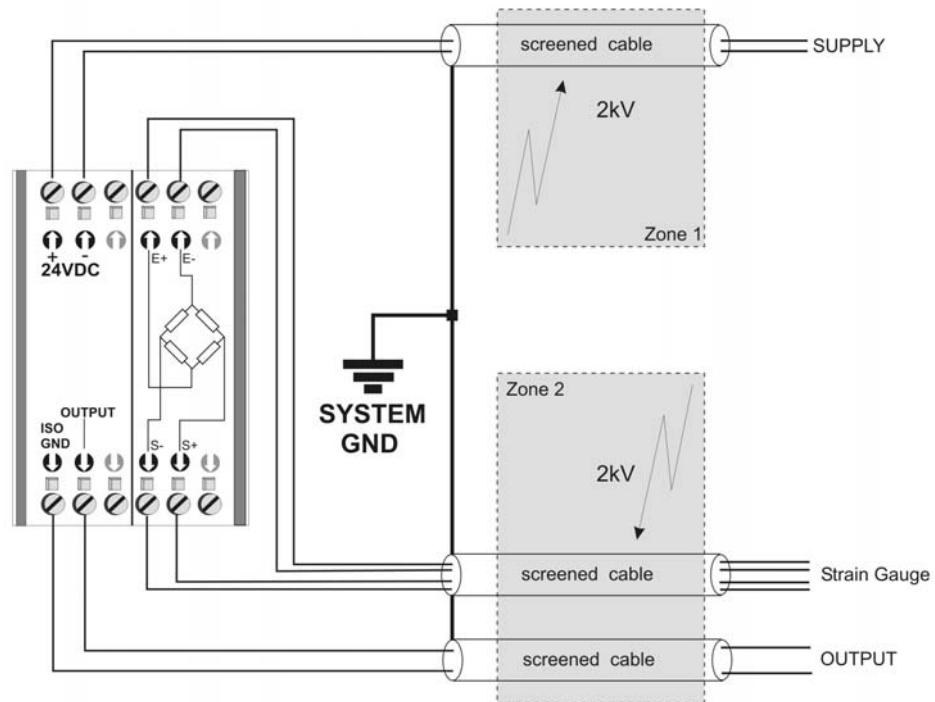
## TESTER

HILO CE Tester

## CE-NORMS

IEC 1000-4-4  
EN 50052-1

## TEST SET - UP



## TEST RESULTS

With Burst of 2kV into the Supply (Zone 1), into the Input (Zone 2) and into the Output (Zone 2) remain the Output Signal within the stated specifications.