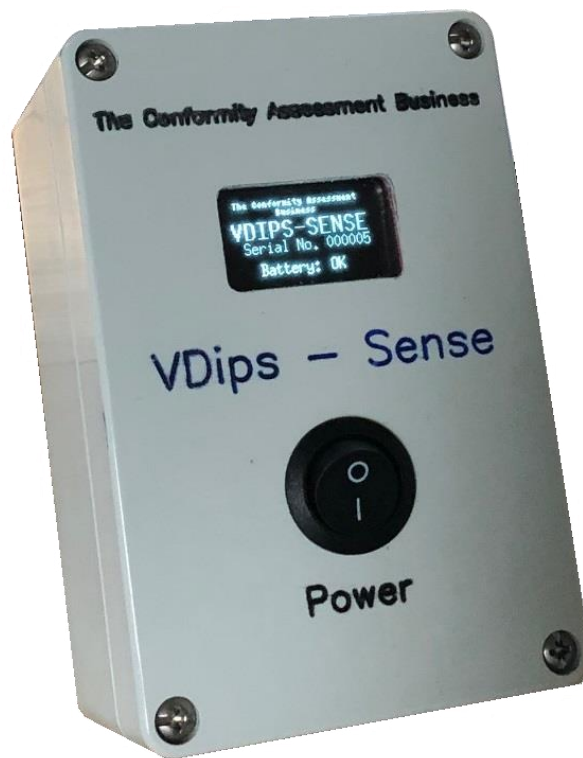


VDips – Sense User Manual



Revision History

Issue:	Modification	Date:	Modified By:
1.0	First Issue	17/12/19	PG

Safety Precautions



The VDips-Sense is used to measure voltage interruptions on the output of test generators designed for testing to EN 61000-4-11. In use, for information, the VDips-Sense displays mains voltage level. This is for indication only and should not be used to check for the presence of mains voltage in other applications.



The connections to the VDips-Sense should be made with shrouded test plugs only



Battery replacement should be performed with the VDips-Sense disconnected from the test generator.



There are no serviceable parts inside the VDips-Sense, do not attempt to disassemble or repair. In the event of a failure or damage please contact the manufacturer for servicing.



Prior to use, the VDips-Sense should be inspected to ensure there is no damage to the case / connectors or battery compartment. If any damage is visible the VDips-Sense should not be used. Any connecting cables used should be inspected for correct insulation and integrity. Any damaged cables should be replaced before use.



If the VDips-Sense requires cleaning then this should be performed with a damp cloth only, ensuring that the outer case is thoroughly dry prior to use.



The VDips-Sense is for indoor use only.

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Contact Details

In the event of any equipment failure, need for repair or any other general enquiry please use the following contact details:

The Conformity Assessment Business



**609 Delta Business Park, Welton Road, Swindon, United Kingdom,
SN5 7XF**



info@conformity-assessment.com



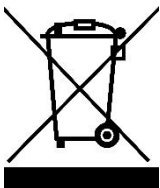
+ 44 (0) 1704 821376



+ 44 (0) 7943 405145



Waste Electrical Equipment (WEE)



The Conformity Assessment Business undertake to accept this equipment at it's end of life for recycling. Please contact us directly to arrange pickup at our cost should the equipment be no longer needed or serviceable.

EU Declaration of Conformity



Declaration of Conformity For Vdips- Sense

Applicable Directives:

- **Low Voltage Directive: 2014/35/EU**
- **EMC Directive: 2014/30/EU**
- **RHoS Directive: 2011/65/EU**
- **WEE Directive: 2012/19/EU**

Standards used to demonstrate compliance:

EN 61326-1: 2013 Electrical equipment for measurement, control and laboratory use — EMC requirements Part 1: General requirements

EN 61010-1: 2010 Safety requirements for electrical equipment for measurement, control and laboratory use - Part 1: General requirements.

EN 61010-2010: 2014 Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-2010: Particular requirements for laboratory equipment for the heating of materials.

We:

The Conformity Assessment Business Ltd.

Registered office address:

609 Delta Business Park, Welton Road, Swindon, United Kingdom, SN5 7XF

Declare that the Vdips-Sense meets all applicable Directives, This declaration of conformity is issued under the sole responsibility of the manufacturer:

Signed:



Date: Tuesday, 17 December 2019

Peter Green, Director (The Conformity Assessment Business)

Introduction

The VDips-Sense provides a very quick verification of interruption duration when testing to EN61000-4-11. It is designed to give the interruption duration from 2ms up to 20 seconds with an approximate 1-2 ms accuracy. This is to verify that the interruption is present and at the correct time duration prior to start of a test program.

The VDips-Sense is not designed to measure reductions in voltage, only full interruptions to 0V.

The VDips-Sense is for measurement of mains voltage interruptions only (220-240V AC 50Hz) single phase. Do not connect two phases of three phase mains to the VDips Sense.

Operation

Connection to the Voltage Dips Generator

The VDips-Sense has two external connections - Live (red connector) and Neutral (black connector). These are also marked L and N on the equipment case. The VDips-Sense will accept input reversal indefinitely.



The connections to the VDips-Sense should be made with shrouded test plugs only

Power-up

Upon switching on, the V-dips sense will display a battery check. This shows LOW at approximately 7V battery level. Measurements made with the battery at this state of charge may not be accurate and the battery should be replaced.

Measurement

The V-dips-Sense will operate continuously monitoring for interruptions in the applied mains supply. During this time, it will display the nominal mains voltage.

Any interruption occurring greater than 1.5 ms (up to 20 s) will be detected by the VDips-Sense and displayed on the screen. Accuracy is typically 1-2 ms.

In order to measure interrupts effectively, a 5 second gap between successive interrupts is recommended as this allows the VDips-Sense to go through its display reporting and back to measurement mode.

Battery

The battery requires replacement at 7 V, this is indicated on the battery check at power-up.



Battery replacement should be performed with the VDips – Sense disconnected from the test generator.

Technical Parameters

Interrupt Detection

1.5 ms to 20 s, typical accuracy 1-2 ms

Maximum Input Voltage

250 V AC, 50 Hz – For use with single phase interruptions only. Do not apply three phase mains to the input (i.e. phase to phase)

Power Supply

9V Alkaline PP3

Battery Life, Approximately 2h continuous use.