

INSTALLATION AND OPERATING INSTRUCTIONS

IRROMETER®
Model RSU-C

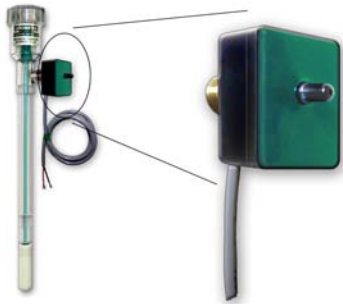
— CAUTION —

Do Not Install by Hand

You must use a wrench on the brass fitting

(9/16" wrench for the 1/4" transducer or 1/2" wrench for the 1/8" transducer)

RSU-C – Remote Sensing Tensiometer



The IRRROMETER RSU-C incorporates a pressure transducer and electronics in a potted waterproof housing. The RSU-C can be installed in the gauge port of any IRRROMETER, thus converting the reading to a 4-20 ma loop current signal. It can be interfaced with a 4-20 ma loop current terminal or to an A/D card designed to read voltage. Excitation current required is 12 – 24 VDC.

The RSU-C is available in two different calibrations:

Standard Instruments (RSU-C-93)

4-20mA = 0-93 kPa (0.172 mA per kPa)

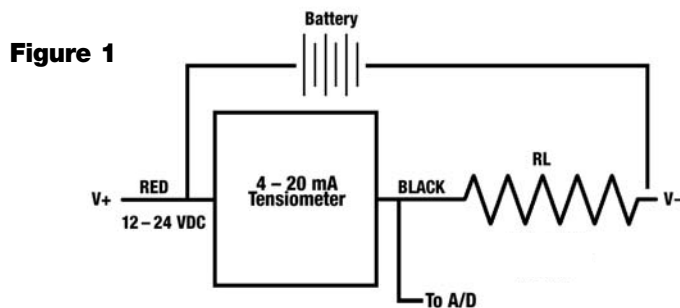
Low Tension Instruments (RSU-C-34)

4-20mA = 0-34 kPa (0.471 mA per kPa)

Note 1: Connection size must be specified when ordering RSU-C only: 1/4" MNPT or 1/8" MNPT.

Note 2: Two wire insulated cable (suitable for direct burial) should be used to connect RSU-C to Electronic Reading Device – #18 AWG size (standard preferred).

For devices that cannot read a current loop but can read a voltage, a resistor can be used to translate the current loop into a voltage. A 250 ohm resistor will convert the 4-20mA output into a 1V to 5V reading. The following figure illustrates this configuration:



— WARNING —

Do Not use water containing chlorine or sulfur (distilled preferred) or cleaners containing chlorine or sulfur with the RSU-C.

When de-airing the transducer equipped IRRROMETER (Model RSU-C) care must be taken to release the vacuum slowly. A sudden release of the vacuum could cause damage to the pressure transducer, rendering the instrument inoperable. Transducers damaged by sudden release of the vacuum are unrepairable and would require complete replacement of the entire transducer assembly.

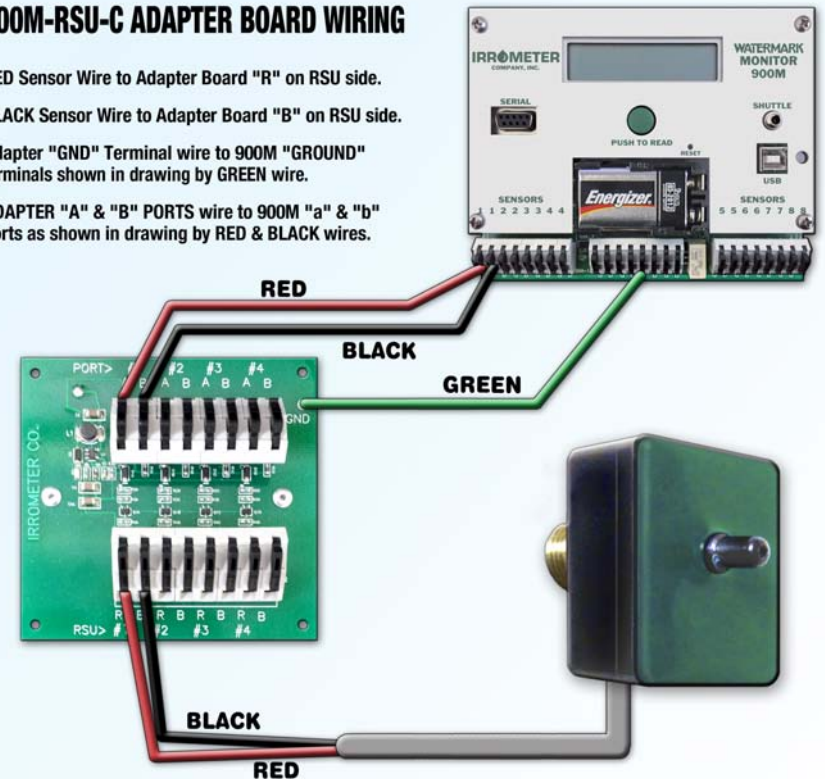
900M-RSU-C ADAPTER BOARD WIRING

RED Sensor Wire to Adapter Board "R" on RSU side.

BLACK Sensor Wire to Adapter Board "B" on RSU side.

Adapter "GND" Terminal wire to 900M "GROUND" terminals shown in drawing by GREEN wire.

ADAPTER "A" & "B" PORTS wire to 900M "a" & "b" ports as shown in drawing by RED & BLACK wires.

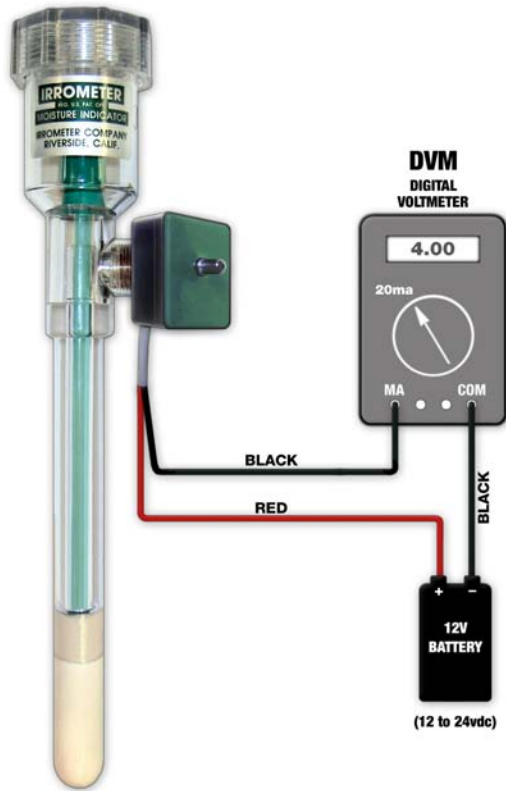


The 900M "RSU-C" Adapter board is used to adapt the RSU-C to the 900M series WATERMARK Monitor.

An adapter board can be used to connect up to four "RSU-C" Transducers to the Monitor.

Four "AA" size batteries (not included) are required to power the board.

Reading the RSU-C with a Digital Meter



VACUUM	RSU-C-93 (Standard Instruments)
0 kPa	The DVM shows 4mA
50 kPa	The DVM shows 12.6mA
93 kPa	The DVM shows 20mA
	RSU-C-34 (Low Tension Instruments)
0 kPa	The DVM shows 4mA
17 kPa	The DVM shows 12mA
34 kPa	The DVM shows 20mA

WARRANTY: The IRROMETER COMPANY warrants its products against defective workmanship or materials under normal use for one year from date of purchase. Defective parts will be replaced at no charge for either labor or parts if returned to the manufacturer during the warranty period. The seller's or manufacturer's only obligation shall be to replace the defective part and neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use of or inability to use the product. This warranty does not protect against abuse, shipping damage, neglect, tampering or vandalism, freezing or other damage whether intentionally or inadvertently caused by the user.

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