EC 1500/1600 FIELD VERIFIER

APPLICATIONS

The Field Verifier allows our electrical conductivity sensors to be quickly checked and tested, without requiring messy calibration fluids. The Verifier simulates 10% and 90% conductivity for a variety of ranged sensors.

FEATURES

- Quick and easy testing of conductivity sensors
- Checks for instrument drift
- One unit covers multiple ranges
- Each range can be tested at 10% and 90% current
- Easy to operate
- Low cost
- No batteries required
- Portable

ESS EARTH SCIENCES PTY LTD
ACN 006 058 395
141 PALMER STREET RICHMOND, VIC 3121
T +61 3 8420 8999 F + 61 8420 8900
ESSEARTH.COM

MADE IN AUSTRALIA

bsi. ISO 9001 Quality Management

WATER MONITORING SOLUTIONS

TECHNICAL SPECIFICATIONS

ACCURACY	± 2% of full scale
RANGE SELECT	Standard: 1000, 2000, 5000, 10000, 20000 µS/cm Waterproof: 1000, 2000, 5000, 10000, 20000, 70000 µS/cm
CURECT SELECT	10% and 90%
TEMPERATURE RANGE	Standard: -10°C to + 45°C non freezing Waterproof: -10°C to + 50°C
POWER SUPPLY	No power supply required
CONNECTOR	Standard: push on banana plug Waterproof: waterproof quick connector
ENCLOUSURE	Standard: IP65 Waterproof: IP67
WEIGHT	Standard: 215 grams Waterproof: 213 grams
DIMENSIONS	Standard: 165mm (L) x 102mm (W) x 48mm (H) Waterproof: 120mm (L) x 65mm (W) x 50mm (H)

OPERATION PRINCIPLE

The Field Verifier simulates the presence of a conduction path linking the two coils in the EC sensor. In the EC sensor head, two coils are mounted in close proximity: a transmit coil and a pickup coil. A sinusoidal excitation is fed through the transmit coil. In the secondary coil when there is no conductive path linking the two coils. When a conductive fluid (usually ionized water) fills the gap between the coils, a current is induced in the liquid, and this links the coils, permitting the secondary coil to pick up signal from the transmit coil. The amount of current is proportional to the conductivity of the liquid. Internal electronics measures the strength of the secondary signal, and so the conductivity is measured. When using the verifier, a simple wire loop incorporating a series resistance takes the place of the ionized liquid. Current is induced in the wire in a similar way to that induced in a conductive liquid. By varying the resistance in the loop with the front panel switch, the amount of current linking the coils is controlled, and hence a variable conductivity is simulated.

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