

LONG-HAUL SUBMARINE CABLE TEST SET MODEL 5903N



The Tinsley Long Haul Submarine Cable Test Set brings the latest technology to the tried and tested DC methods of cable fault location for all submarine cable systems. Modular design allows for variable power outputs to meet client requirements.

**NEW
UPDATED
DESIGN**
WITH MODULAR
POWER
OUTPUT

The more common test procedures which are associated with the location of types of cable fault such as 'open circuits' and 'shunt faults' are preprogrammed into the instrument.

This allows the procedure to be carried out automatically therefore eliminating operator errors and reducing the uncertainty of the predicted fault position.

Principle of operation

The instrument may be set for a wide range of voltage and current limits making it suitable for use with most submarine communication cable systems. Safety being an important feature, the instrument gives a continuous indication of the state of charge of the cable under test and will automatically disallow current, voltage or polarity changes to be made until any voltage on the cable has fallen to a level which is safe for both the cable and the instrument. To ensure complete operator safety a number of interlocks operate disconnecting all power

before access is allowed to the high voltage areas.

The setting up of the instrument is via the menu driven touch screen display. This display is also used to indicate the progress of a test procedure during its implementation.

Functions may also be controlled via a computer and data obtained may be stored for future analysis. Two 5903N may also be used to enable two 5903N's to be connected with each other when carrying out double ended tests such as 'no loss of current'.

SPECIFICATIONS

See the tables below for product specifications.

Features	
Dynamic Polarity Control Positive or Negative Cable Feed	
Operation Modes Constant Current, or Constant Voltage	
Settable Maximum Cable Voltage and Current Limits	
Electroding Generator 15Hz- 45Hz Adjustable Modulation	
Full History log against each cable installation	
Automatic or Manual Mode	
Stored cable parameters	
Self Contained, with colour LCD.	
External Safety Interlock	
External Power-on Alarm Contacts	
Self Test using internal calibrated Reference	
Operational Modes	
Cable Test, Resistance, Capacitance, IR Impedance, No Loss of Current	
Kennelly's Two & Three Current Test, Schaefer Test Method, Open Circuit	
Short Circuit, Fixed Load, Power Feeding	
Input Requirements	
3 Phase 20 Amps	
Sea Earth	
System Safety Earth	
Power Output Options	
Single Module	10Kv, at Max 1.2 Amps 20Kv at Max 0.6 Amps
Dual Module	10Kv at Max 2.4 Amps 20Kv at Max 1.2 Amps
Triple Module	10Kv at Max 3.6 Amps 20Kv at Max 1.8 Amps

Resistance measurement in ranges	
1-9.9R	
10 to 99.9R	
100 to 999.9R	
1K to 10K	
10K to 100K	
Resistance Accuracy	1%
Capacitance Measurement	
0 to 1uF	
1 to 10uF	
10 to 100uf	
100 to 1mF	
1mF to 10mF	
10mF to 100mF	
Capacitance Accuracy	2%
Insulation Resistance	10x10 ⁴ to 10x10 ⁷
Voltage Measurement	10v to 20Kv
Current Measurement	10uA to 3.6A
Single Unit Variant	Size: 19" Wide, 82cm Deep, 160cm Weight: 95kgs for single Unit
Dual Unit Variant	Size: 19" Wide, 82cm Deep, 160cm Weight: 115kgs
Triple Unit Variant	TBA

* Subject to change without notification.