

Ariadna IC1G

Ultraportable live network LV lines identifier

Electric utilities and their contractors need to identify electric cables on service under certain circumstances: when opening a trench, when making branch circuits, before and after distribution network maintenance duties, etc. This identification has to be quick and unambiguous due to possible consequences (life threat, network failure, etc.) that could derive of choosing the wrong cable.



Signal injection in a power-box using the IC1G transmitter (TX)

Ariadna Instruments has developed the IC1G, an ultraportable Cable Identifier which is used in LV distribution cables for positive cable identification and cable location.

The IC1G Cable Identifier consists of a transmitter (IC1G-TX) and a receiver (IC1G-RX). The equipment is easy to use: the transmitter (TX) is connected to an LV distribution cable and the receiver (RX) is used to identify or locate that cable upstream, towards the MV/LV transformer.



Cable identification in the LV output of an MV/LV transformer using the IC1G receiver (RX)

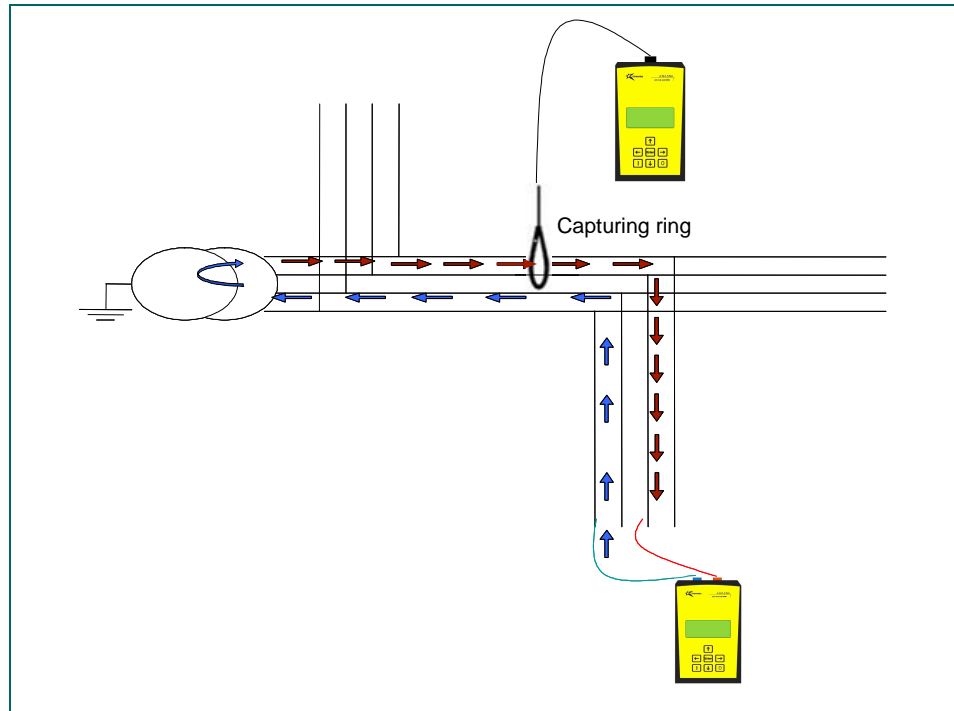
Main features:

- Positive cable identification and cable location without de-energizing the line.
- Works on LV distribution cables up to 250 V (50 or 60 HZ networks).
- Presents three different sensors, depending on :
 - Sensor Ring** (Rogowski coi): Identifies the cable by placing the sensor ring around the cable. It also obtains polarity information (A).
 - “U” sensor**: Detect signals by touching the cable.
 - “T” sensor**: Allows receipt of signal at distance.
- The identification algorithm works continuously, and positive identification is achieved in seconds.
- Easy to use due to automatic synchronization between transmitter and receiver.
- The graphic display shows voltage at signal injection point (TX), current (RX), received signal polarity (RX) and battery information (TX and RX).

Working diagram

Ariadna IC1G is compliant with EU Low Voltage Directive 72/23/CEE and EN 61010-1 (Safety requirements for electronic equipment for measurement, control and laboratory use).

The above mentioned conformity is indicated with the CE symbol.



Technical features

IC1G-TX (Transmitter)		IC1G-RX (Receiver)	
Output current:	100 A Peak	Identification indication:	Acoustic and visual (display)
Max. network voltage for signal transmission:	250 V	Location indication:	Acoustic and visual (display)
Power supply:	4 x1,5v AA batteries	Power supply:	4 x1,5v AA batteries
Operating temperature:	-10°C / 55°C	Operating temperature:	-10°C / 55°C
Dimensions (cm):	12 x 22 x 6,5	Dimensions (cm):	12 x 22 x 6,5
Weight:	0.75 kg	Weight:	0.75 kg
Protection:	IP54	Protection:	IP54
Overcurrent protection:	6A 10x38	Signal sensors:	Inductive, BNC connection
Signal injection:	Direct, c. clamps	Sensor cable length:	250 cm
Injection cable length:	180 cm		

Power cable identification and location solutions



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