

Merytronic PI-3

De-energized Phase Identifier

Merytronic PI-3 de-energized phase identifier is a robust, user friendly and advanced digital tool. It helps users to **easily identify any de-energized electric cable and its phases**, among multiple conductors, in substations, trenches, manholes, panels, aerial/underground conversions, etc.

The transmitter includes three inductive clamps and three crocodiles. Therefore, it can detect each one of the phases of a feeder without changing the transmitter connection. It also helps to identify both de-energized cables prior to be cut and open cables (once they have already been cut) to join the phases of both sides correctly.

With a single device, **any types of cables** can be identified in both **Medium and Low Voltage** and it does not require calibration prior to identification.



Main features

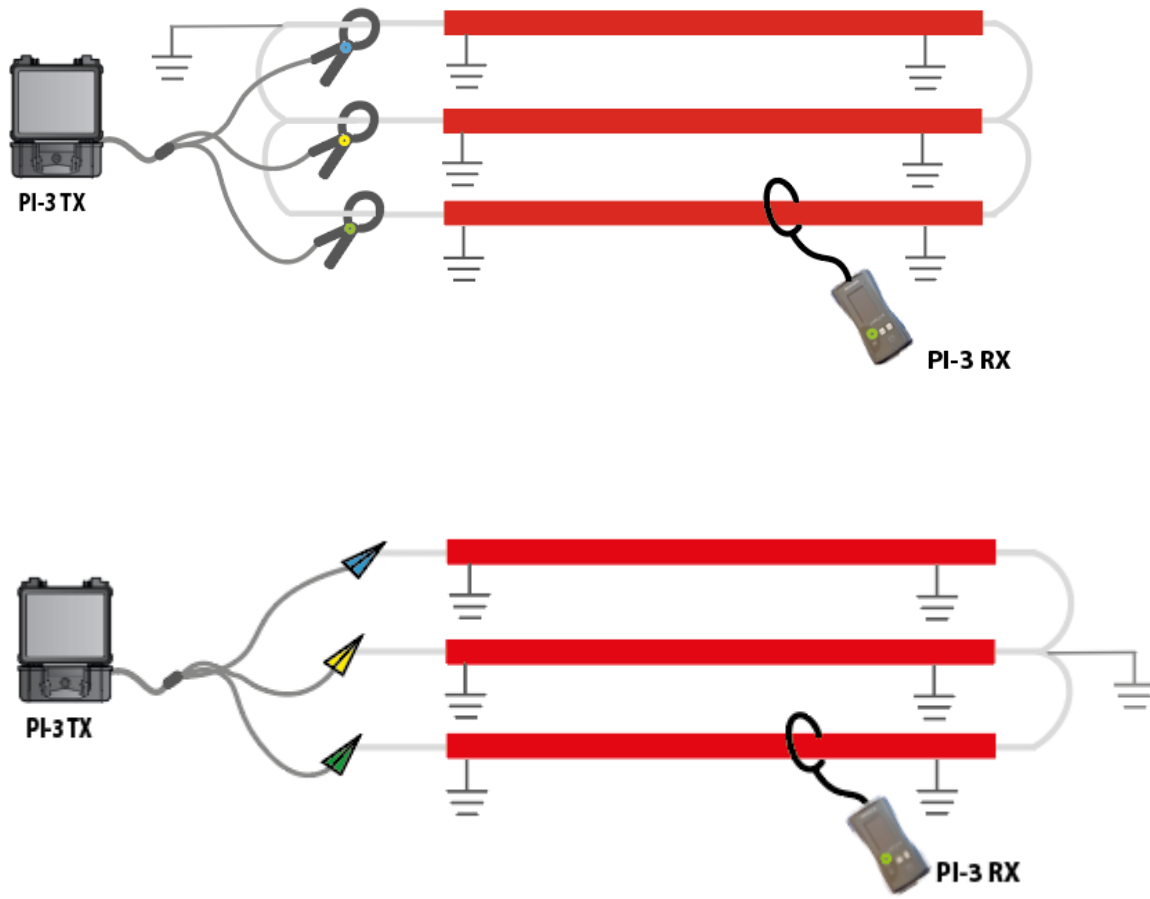


- **Identify any De-energized cable**
- Single-phase and multi-phase cables
- Signal injection:
 - **Direct connection**
 - **Induced with induction clamp**
- **Max. cable length > 50 km (*)**
- Rechargeable battery in transmitter. Operation time > 12h (continuous injection with inductive clamps).
- It doesn't require calibration before using it (calibrated at factory)

(*) Direct connection, value determined on cable of 50 mm²

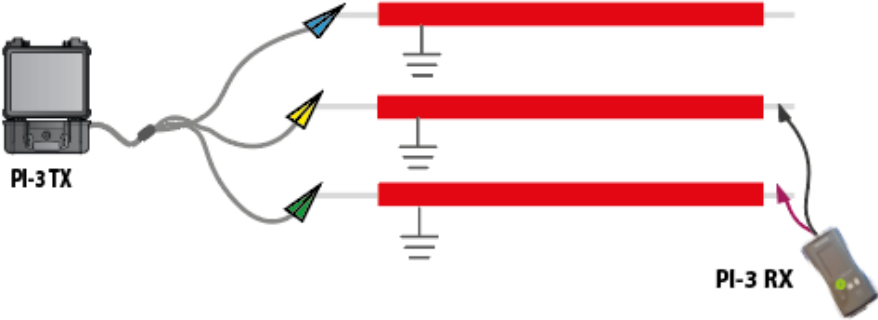
Working diagram

Phase identification with only one test, on lines with both ends in short-circuit

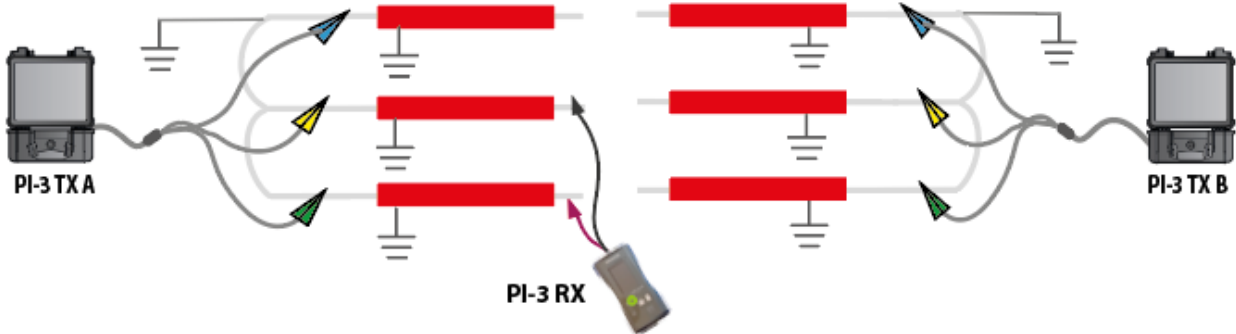
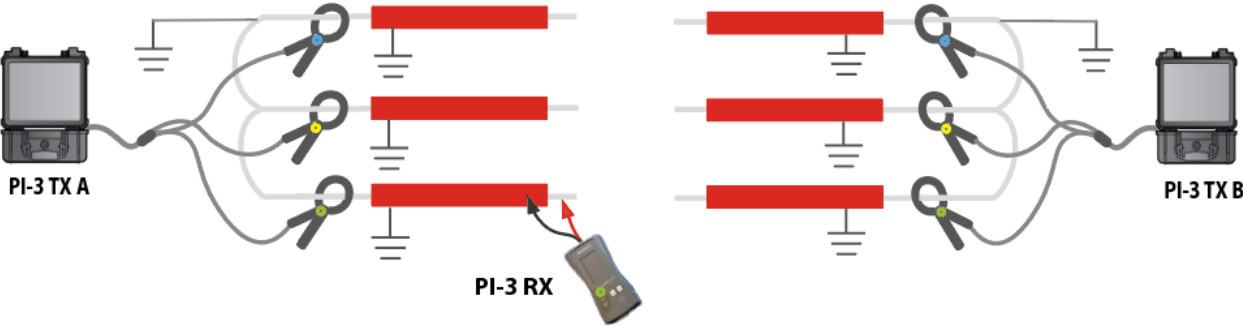


To identify phases in cut cables without short-circuit





For joining two three-phase lines phase to phase



Technical features*



*Specifications subject to change without notice



Merytronic PI-3 TX



Merytronic PI-3 RX

Size (mm)	213 x 173 x 97	Size (mm)	120 x 220 x 65
Weight	1.5 kg	Weight	0.4 Kg
Protection degree	IP65	Protection degree	IP54
Protection against electric shock	Class II 	Active signal analysis (From Ariadna -TX)	Amplitude & polarity
Signal type	Polarised AC current	Max. cable length	> 50 km (50mm ² cable in laboratory conditions)
Active signal power	10W	Max. loop resistance	1.000 Ω (Direct) 10 Ω (Induced)
Power supply input	90-264 VAC ~50/60Hz 0.55A	Display	240 x 400 Color TFT
Power supply output	12V DC  2A	Batteries	4 x 1.5V AA
Fuses at the end of power cables	6.3x32 mm 16A 500V 50KA type F (quick acting)	Operating Temperature	-10 / 55 °C
Display	LED indicators	Internal speaker	Yes (for sound alert)
Operating Temperature	-10 / 55 °C		
Charging temperature	0 / 55 °C		
Operation time	> 12h (inductive clamps)		
Rechargeable battery	7.4V 6.6Ah Li-ion		
Car charger	Yes		

Compliance standards

Merytronic IP-3 complies with the following safety standards:

- Electromagnetic compatibility: EN 61326-1
- Electrical safety: EN61010-1
Protection against electric shock. Class II.



Power cable identification and location solutions