

Electric & Electronic Systems
For Remote Data Delivery and Control



Transmitter Unit

Receiver Unit

Dead Line Phase ID 1200

Cellular Built-In

Fast • Accurate • Easy to Use

Introducing DLPID 1200

Determination of the phase of a given cable is required when system maintenance is being done or new equipment installation takes place. Historically, distribution companies experience scheduled outages and unscheduled open auto-feeder events throughout the year.

PSI's novel Dead Line Phase ID System is a non-intrusive tool that is versatile and easy to use. The system correctly identifies the phase of de-energized medium voltage distribution cables at a range in excess of 10 miles.

Additionally, the DLPID system can also be used to verify the feeder and phase of a cable that is "in connectors" prior to final application of the insulating splice.

The PSI Dead Line Phase Identification System enables utilities to quickly and accurately identify the phase of de-energized low and medium voltage distribution cables. The DLPID 1200 has these features:

- Fast and easy to use
- Web enabled permanent recording of phase measurements
- Designed for both OH & UG distribution cable systems including triplex cables

- Solid Dielectric & PILC cables
- LCD Display of phasing data (A,B,C: 1,2,3) as appropriate
- Cellular wireless automation
- Color coded CT's (Red, White, Blue)
- Utility tested
- Simultaneous display of data from two transmitter units

Utility Tested

The PSI DLPID 1200 was successfully tested **under tough field conditions** by utility service crews using cellular wireless communications. The DLPID system has proven itself by successfully determining the phase of de-energized cables.

DLPID 1200 Description

To allow for immediate Dead Line Phase Identification (DLPID) in the field, PSI has developed a method for determining cable phase using a portable tool that is easy to use. The operator of the tool uses a communicating transmitter at two nearby transformer locations with the cable to be phased, and a communicating receiver located at the cable splice location.

The phase of that cable under test is read out on a receiver unit display. The PSI

hardware that embodies this system is shown above.

Benefits

PSI's DLPID System offers **fast, accurate and easy to use** de-energized cable phase identification. The PSI DLPID system enables utilities to improve the quality of operating practices and their readiness to deal with emergencies. The potential benefits are significant and result in:

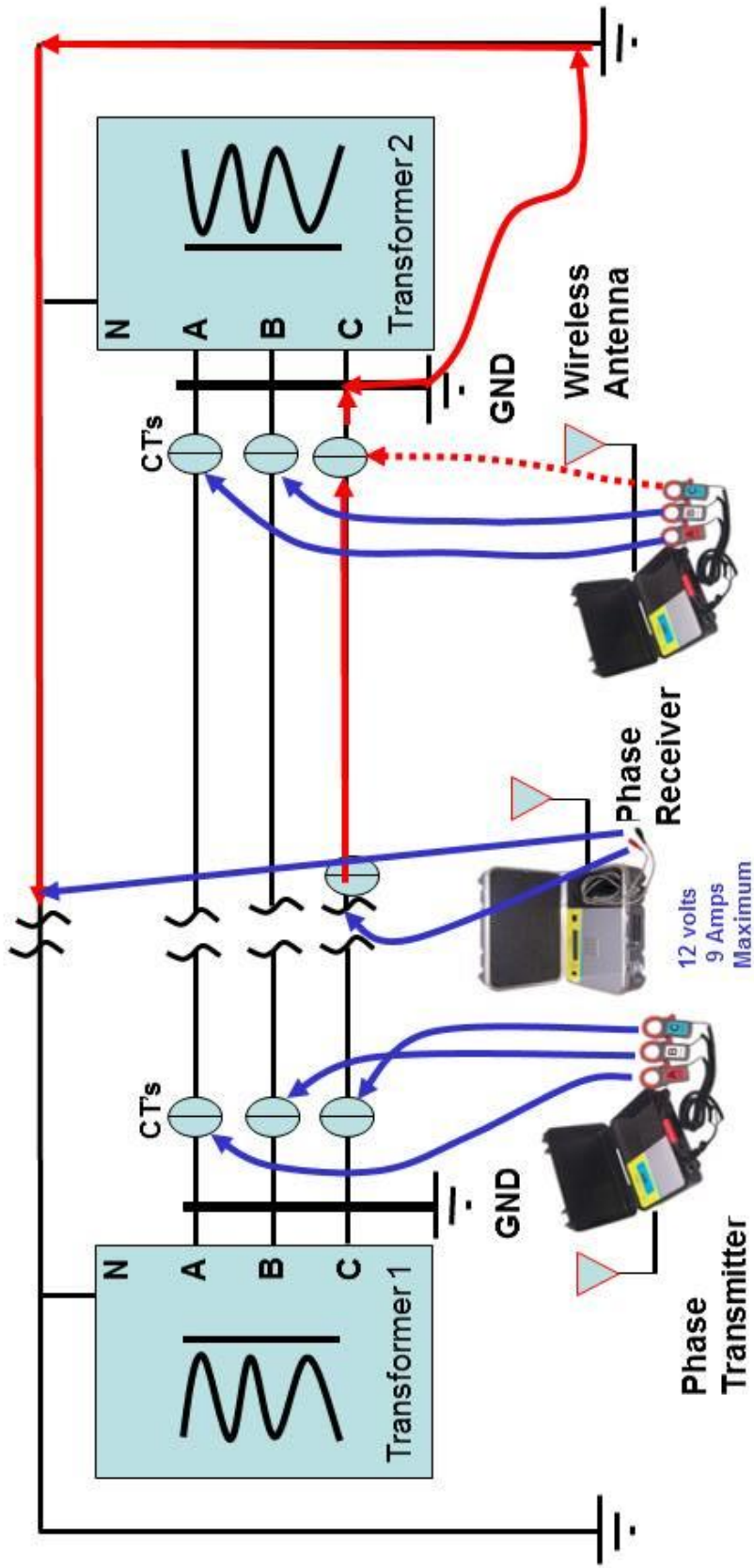
- Accurate Phase ID of dead line underground MV cable will **expedite open auto feeder restoration** when identification of phases can not be established due to open circuits.
- Increased flexibility during re-cabling will allow splicers to **rack cables around in manholes** and vaults.
- **Improved** overall distribution system reliability.
- By allowing a splicing crew to determine their own phasing **programmed maintenance is expedited.**

PSI's Patent
(U.S. Patent No. 8,076,923 2011)

DLPID System Set-up

Correctly identifies the phase of de-energized cables at a range up to 10 miles.

This system can be used with grounded cables or on open circuits.



POWER SYSTEMS INTEGRITY, INC.