



**Quality Assurance for Deep Foundations**

## **TAP-EDGE REVISION 3.X LED DEFINITION AND OPERATION**

Pile Dynamics' Thermal Access Portal, TAP-Edge, is equipped with a tricolor LED (Light Emitting Diode) capable of producing solid/flashing red, green, or blue to indicate device status and operational mode.

### **POWER-UP INITIALIZATION**

On initial power-up the LED will display one green pulse, one blue pulse, and one red pulse. Each 1 second long. Followed by three blue pulses for revision level.

Afterwards the Edge will go into normal operation with the following LED meanings.

### **BLUE LED -SOLID**

Solid blue LED illumination indicates that the Edge is directly connected to either a TIP main unit, or a TAG for communication to the cloud. During normal operation, with a Thermal Wire connected, the Edge will attempt to communicate to a TIP or TAG every 1 minute. This attempt at connection may be seen as a ¼ second pulse on the Blue LED.

### **GREEN -FLASHING ONE ¼ SECOND PULSE EVERY 5 SECONDS**

This is the idle state for the Edge device. It indicates that the Edge is working correctly and is between connection attempts to the TIP or TAG. Additionally, the connected Thermal Wire has no error condition associated with it.

### **GREEN -SOLID**

Indicates the Edge has been started with a turn on plug and doesn't expect to see a connected Thermal Wire. The turn on plug offers the user a more efficient way to upload data records as the normal 1 minute TAG connection attempt is reduced down to 10 seconds. If both the Edge and the associated TAG are powered on using a turn on plug, both devices are effectively in continuous upload mode.

**⚠** *If the user has in fact connected a Thermal Wire, a solid green LED indicates that the Edge is unable to read anything from the cable and has determined nothing is connected. No data will be collected in this situation, and the user should investigate further.*

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### **RED -FLASHING**

A flashing red LED indicates a significant error that will probably affect the acquisition of Thermal Wire data.

Problems include:

- Thermal Wire configuration fault. The initial read of the cable failed to produce a valid serial number or length. Cable serial number will be “UNKNOWN” and length will be 100 nodes for default purposes.
- Two sequential Thermal Wire sensor problems.
- TAP on board data storage full, unable to save additional Thermal Wire interrogations
- TAP on board real time clock failure.

### **RED -SOLID**

A solid red LED indicates a non-recoverable hardware error with the Edge device and should be replaced/repared immediately.