



## Main features

- Enabling measurement of PLC line quality in any chosen distribution line segment
- Transmitting G3PLC (CENA + FCC) or PRIME pulses once per second
- Small and compact device to be placed anywhere in the line where PLC signal anomalies are suspected
- The device can serve as a data concentrator and be positioned anywhere throughout the line
- No interference with existing data concentrator communication in the line
- Together with the Power Line Tester enables a seamless evaluation of the quality of the PLC line at a certain segment
- 4 level adjustable signal amplitude
- Protocol selection button for G3PLC (CEN-A or FCC)
- Simple (press-button-and-forget) on-site usage (connect & go)
- Solid manufacturing and safe use in all demanding environments (CAT IV compliance for TS measurements)
- Used for specific outdoor and high voltage environment
- Adhering to the EN50065 amplitude level requirements
- power related issues:
  - 230V AC LINE input voltage, power supply included
  - Embedded rechargeable Li-Ion battery
  - Up to 10h standalone battery operation
  - LED function and power indicator

## Device Application

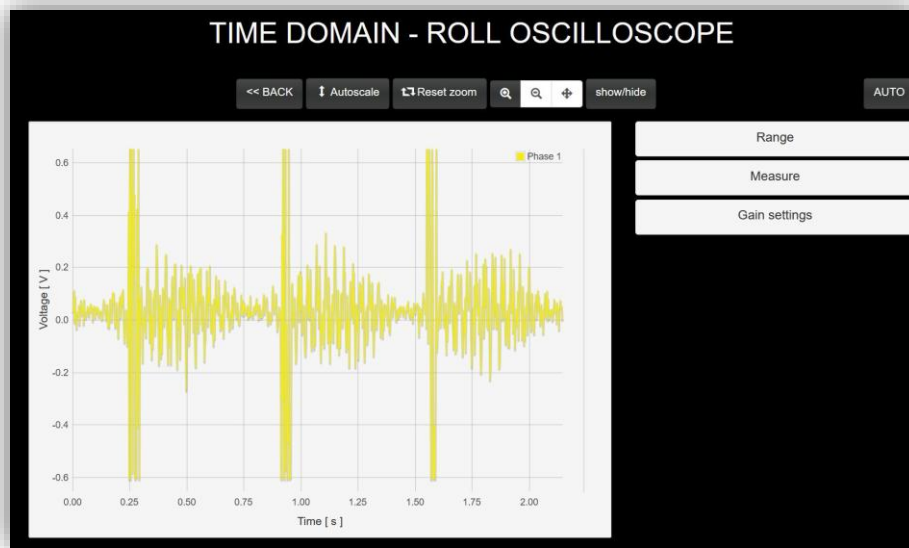
The main aim of the PLT PULSAR device is to **induce periodic and hence predictable PLC messages** into the line. These messages adhere to EN50065 amplitude level requirements and can serve as a portable PLC signal emitter. As the device is small and compact it can easily be **placed at any point in the line** where PLC signal anomalies or automatic meter readout problems have previously been detected.



*PLT PULSAR and the PLT 200- size comparison*

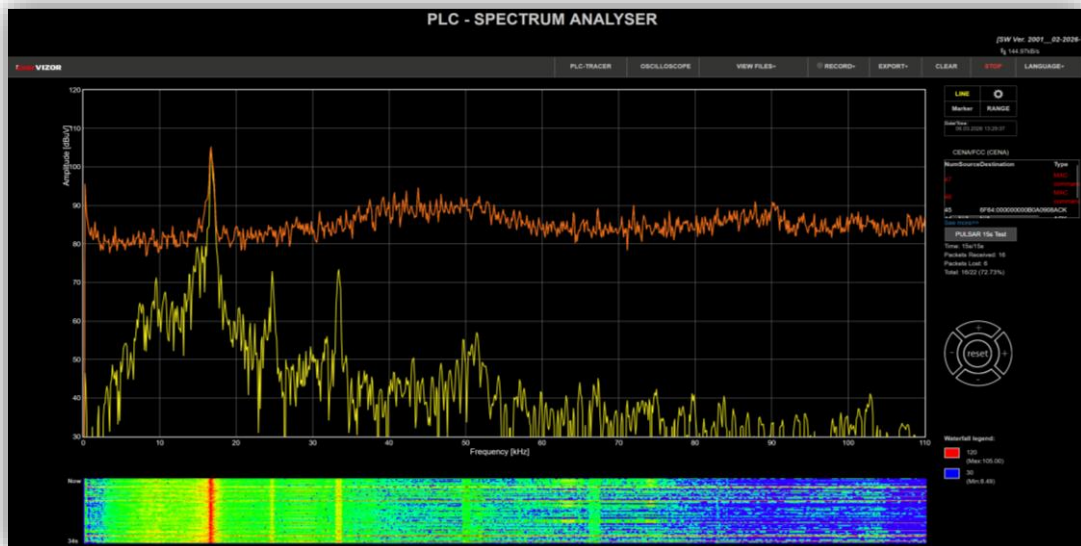
Together with the Power Line Tester (PLT-200, PLT-200-3 or PLT200-C2) it can quickly help determine the **message-loss** as well as the **signal attenuation ratio** at the line segment where the transmit-receive

measurement is being done. The PLT PULSAR serves as the emitter whereas the PLT devices are receivers of PLT messages.



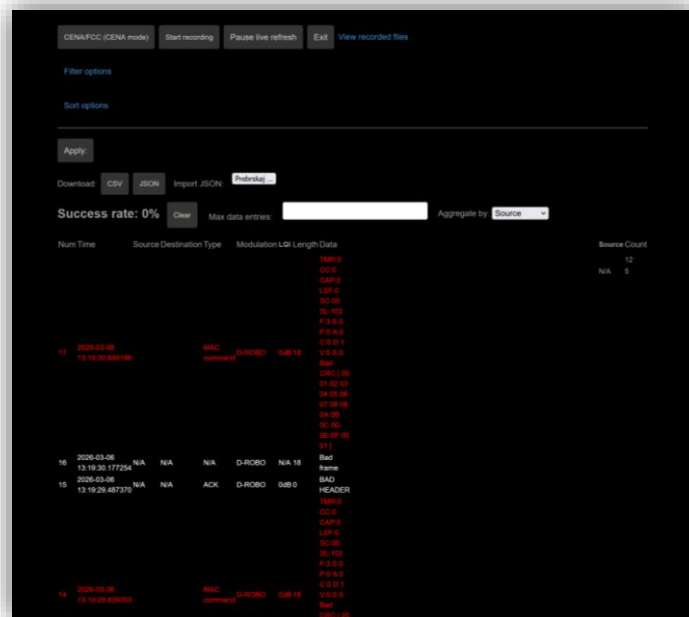
*Emitted periodic PLT PULSAR signal in time domain*

The messages emitted by the PLT PULSAR **do not in any way interfere with the PLC messages** which are already being exchanged within the power line. The messages are easily discerned from existing ones with a different color whereas the PLT PULSAR ad-don software enables an easy line assessment by detecting the message loss-ratio aswell as physical signal attenuation:



*Spectrum analysis with the PLT PULSAR with received messages (red messages are from the PULSAR and white the existing PLC communication)*

To further analyze the nature of the channel quality the PLC messages can also be analyzed with the **PLT LQI - Link Quality Indicator** coming from the internal demodulator:



Analyzing the PLC messages with the help of the PLT Tracer where messages can be assessed also through the LQI signal quality parameter

The device also enables a quick selection of the required G3PLC signal protocol with a **CEN-A/FCC switch** (the PRIME variant does not have this switch) and the adjustment of amplitude with an **amplitude knob**:




Device side view with G3PLC band switch, amplitude level knob and on-off switch

## Compliance with standards

The FMS unit complies with the following international standards:

Standard EN	Description
EN 61010-1:2010	Safety requirements for electrical equipment for measurement, control, and laboratory use. General requirements
EN 61010-2-030:2010	Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 2-030: Particular requirements for testing and measurement circuits
EN 61326-1:2020	EMC requirements for electrical equipment for measurement, control and laboratory use - Part 1: General requirements
EN 50065-1:2011	Signalling on low-voltage electrical installations in the frequency range 3 kHz to 148,5 kHz - Part 1: General requirements, frequency bands and electromagnetic disturbances

Table 1: List of applicable standards






**EnerVIZOR**

**PLT PULSAR**  
**[G3-PLC or PRIME]**

<b>MEASUREMENT INPUT</b>
Input: CAT IV 300V
Connection type: phase-to-neutral

<b>MAINS POWER SUPPLY</b>
Input: 100-240VAC, 50-60Hz
Maximum rated power: 1W

## ***Ordering information***

To order this product please use the following product ordering code:

**PLT PULSAR - [G3PLC / PRIME]**

***[G3PLC] G3-PLC CENA and FCC  
[PRIME] PRIME v1.36***