



PLT 200

SmartMeter Powerline Tester

- **Measurement and testing of physical level of PLC communication**
- Designed for **G3-PLC (CENELEC-A and FCC band), CENELEC-S FSK, PRIME or meters&more** communication technology
- **1-phase (PLT 200-1), 3-phase (PLT 200-3), or Current measuring (PLT 200-C2)** operation
- **Spectral analysis in narrowband 20kHz-500kHz** (CENELEC-A and FCC band) frequency bandwidth
- **PLC sniffing** for real-time monitoring and recording packages within the PLC line for **G3-PLC or PRIME**
- **Web browser** used for full device operation
- **Online viewing** of recorded data files and **online file browsing**
- **Offline PC-based – “Offline PLT Viewer” SW** for recorded data analysis included
- **Roll-oscilloscope time analysis** in 20kHz-500kHz frequency
- **bandwidthRemote operation via Wi-Fi or LTE modem (option)** for remote control and measurements through **VPN**
- **Simple** (button-less) **on-site usage** (connect & go)
- **Solid manufacturing** and safe use in all demanding environments (**CAT IV compliance for TS measurements**)
- Measuring PLC attenuation with the **PLT PULSAR** device which generates periodic 1Hz pulses of **G3PLC (CENA + FCC) or PRIME** unique signals

PLT 200-1 · PLT 200-1-C2 · PLT 200-3 · PLT PULSAR

This product represents **testing equipment in the form of a spectrum analyzer with PLC sniffer** enabling the **observation and logging** of physical levels of PLC communication such as levels of PLC frequency carriers, disturbances, noise or other unwanted frequency harmonics, within **narrowband frequency bandwidths ranging from 20kHz to 500kHz or higher frequencies upon request**. At the same time it shows the nature of **exchanged communication packages** within the line and gives an idea about data throughput quality. With the help of the **PLT PULSAR device** which emits G3PLC or PRIME pulses once per second one can simulate the presence of a data concentrator and evaluate the **quality of the PLC line** at a certain segment.

Technical data

- Designed for **G3-PLC (both CENELEC-A and FCC band), CENELEC-S FSK, PRIME or meters&more** communication technology analysis in **narrowband PLC 20kHz-500kHz** (CENELEC-A and FCC band) frequency bandwidth
- **1 phase** (PLT 200-1), **3 phase** (PLT 200-3), or **Current measuring** (PLT 200-C2) devices available
- **A web browser** used for data monitoring and data logging operations **on a PC or any iOS or Android mobile device**
- **Online viewing** of recorded data files through an integrated slider-based viewer and **online browsing, deleting and downloading** of recorded data
- **PLC sniffing in every device with the PLT Tracer for G3-PLC (CEN-A and FCC) and PRIME** PLC standards. Real time monitoring of packets shown simultaneously with the spectrum.
- **PC-based "Offline PLT Viewer" SW** for analyzing recorded data is included with the device enabling 3D heatmap analysis and animated gif creation of multiple records at the same time
- **Time based roll-oscilloscope signal analysis** available for much easier immediate transmit/receive PLC signal recognition
- **Data recorder logging** is implemented either on-board the device or at the server side either **on-demand, amplitude/frequency trigger-based or timer based**
- Data recording is done on an **8GB or (optionally) 32GB flash memory** which is enough for over 400 thousand (8GB) or 1.5 million (32GB) stored spectrum frames
- The current measuring device PLT 200-C2

offers an out-of-the-box **impedance amplitude spectrum real-time evaluation**

- **Data files** are stored in user-friendly csv or **animated gif format at configurable time intervals**
- **Remote operation** via LTE modem (option) enabling operation from the office through a secure VPN tunnel
- **PLT PULSAR** is a battery powered unit with adjustable amplitude and a protocol selection button

Power

- 230V AC LINE input voltage, micro-USB power supply included
- Rechargeable Li-Ion battery inside
- Over 4h standalone battery operation

Communication

- WiFi operating in access point mode
- LTE USB modem option enabling remote device access via self established VPN connection (modem can be provided)
- Ethernet TCP/IP connection enabling out-of-the-box VPN remote access

Enclosure

- Used for specific outdoor and high voltage environment
- Solid construction and design with ABS plastic enclosure in silicone rubber casing

Interface

- USB port (USB OTG)
- Ethernet 1Gb/s

Standard compliance

- CATIV 300V
- EN 61010, EN 61326-1, EN 301 489

PLT 200-1
(One phase instrument)



PLT 200-C2
(Current measuring instrument)



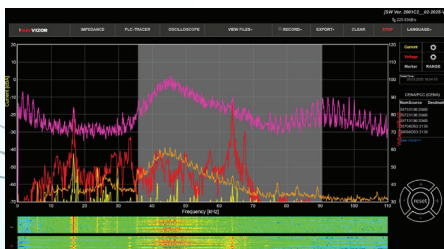
PLT 200-3
(Three phase instrument)



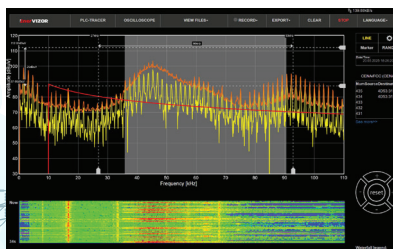
PLT PULSAR
(Periodic 1Hz G3PLC or PRIME signal generator)



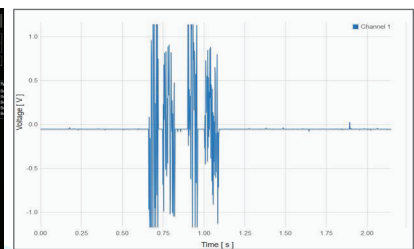
Current and voltage signal analysis



G3PLC measurement and PLC sniffing



Time domain PLC signal analysis



Solving remote meter reading issues in AMI systems