



Correlux P-1

Digital correlator for leak location on water pipelines

Benefits:

- ▶ **Reliable measurement results**
- ▶ **Ideal on plastic pipes**
- ▶ **Easy handling**
- ▶ **Rugged design**
- ▶ **Long operating time**

Functional description

The correlator Correlux P-1 is used for leak location on pipes for potable water. Water, escaping from a leak under pressure creates a noise which travels into both directions of the pipe. This noise is recorded by two sensors (piezo-microphones, hydrophones) attached to the pipe (e. g.: valves, hydrants), amplified and transmitted to the correlator. The Correlux P-1 compares both signals (correlation) and calculates the exact distance to the leak by use of the signal delay, the sensor distance and the sound velocity.

All advantages at one glance

- ▶ Easy handling with rotary encoder
- ▶ Rugged and compact design
- ▶ Simultaneous display of the correlation chart and the coherence spectrum (FFT- analysis)
- ▶ Quick filter optimisation without using menus
- ▶ Fast and easy leak identification by using the overview measurement with unknown pipe parameters
- ▶ High radio output for broad reach
- ▶ Transmitter and correlator with direct headphones plug-in to listen live to the leak noise
- ▶ Recharging the complete system in the closed case – direct charging is possible, too
- ▶ Up to 6 pipe sections measurable
- ▶ Active piezo ceramics accelerometers, best suited for plastic pipes
- ▶ Automatic and manual filter adjustment 0 ... 4000 Hz

Scope of delivery

Correlux P-1	P1 Basic	P1 Standard	P1 Pro
DK P1 Correlator	x	x	x
TR A transmitter + sensor	x	x	x
TR B transmitter + sensor		x	x
Headphones	x	x	x
Ground microphone			x
Transportation case	Option	x	x
Recharger	x	x	x
Hydrophone	Option	Option	Option

Software	P1 Basic	P1 Standard	P1 Pro
Listening mode			x
Chart memory		x	x
PC software		x	x

Options

- ▶ Hydrophones to use on plastic pipes



Technical Data

Correlux P-1

Processor	RISC- and DSP-processor
Display	320 x 240 Pixel, ¼" VGA mono-chrome
Data entry	Rotary encoder with enter function
Memory capacity	10 charts (incl. comment)
Power supply	Internal Akku, NiMH, external 12 V DC (car-adapter), 100- 240 V AV
Operating- / charging time	> 18 h / < 3 h
Interface	RS 232 (updates, print out and data communication via PC)
Connections	Sensor/ Hydrophone direct connection, antenna, headphones/ recharging, charging contacts in case
Protection class	IP 67
Operating temperature	-20 °C ... +60 °C
Dimensions/ weight	270 x 130 x 240 mm / 3.3 kg

Transmitters TR A/ TR B

Display	LCD, 2 x 16 characters
Readout	Battery state, noise level, system state
Buttons	On/Off, lighting, volume
Radio frequency	433 MHz
Transmitter power	< 500 mW
Operating- / charging time	> 18 h / < 3 h
Power supply	Internal Akku, NiMH, external 12 V DC (car-adapter), 100- 240 V AV
Connections	Sensor, antenna, headphones
Protection class	IP 67
Operating temperature	-20 °C ... +60 °C
Dimensions/ weight	230 x 110 x 190 mm / 2.3 kg

Sensors PAM CORR

Sensors PAM CORR	Piezo sensors with active amplifier
Connecting cable	Highly flexible silicon cable
Adapter	Magnet adapter
Operating temperature	-20 °C ... +80 °C
Dimensions/ weight	38 x 78 mm / 0.4 kg