

# Geo-/Correlator LOKAL 300/2



# FAST

## Multi-functional Correlator

- portable
- correlator / geophone / listening device in one compact system
- user-friendly control features
- solid aluminium case
- 500 mw transmitter (with official approval)
- direct charging through lighter in vehicle (no adapter required)
- plug-in points for headphones at central unit and measuring boxes

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# F A S T

## Geo-/Correlator LOKAL 300/2

### Measuring Principle

The multi-functional F.A.S.T.-LOKAL 300 leakage detection system is applied to detect leakages (correlation and geophone) on drinking-water networks and to trace out pipelines. Simple operational handling enables even unskilled operators successfully to locate leakages. The pressurized medium inside the pipe generates a leakage-borne noise at the leakage spot. This noise travels in both directions through the pipe and is detected by highly sensitive sensors which are mounted at accessible places such as hydrants, valves, etc.. The amplified pick-up signal is radio-transmitted to the central unit, and the coherence and correlation functions are calculated and displayed on the LCD.

### Testrod and Geophone

The testrod has been developed by F.A.S.T. GmbH and features an extremely high sensitivity. It has been designed to detect even minute leakages. As the length of the testrod is adjustable, it is perfectly well suited to listen to water meters and to systematically check pipeline network sections. When leakage-borne noises have been detected with the testrod or when the result of the correlations has to be double-checked, the integrated geophone can be applied. The filters are automatically or manually set according to the kind of leakage-borne noise. The in-built data memory device allows a comparison of the detected noises and thus supports the pinpointing process to precisely locate the leakage.



### Technical Specifications

#### Central unit

resolution	0.2 m
AFS function	automatic search for frequencies
memory capacity	20 correlations
filters: high-pass/low-pass	15 steps each
operating/charging time	about 14 hrs. / 3 hrs.
graphics	240 x 64 points
interfaces	RS 232, printer interface
connections	sensor / hydrophone / antenna / headphones
temperature range	-20°C up to +60°C
dimensions	260 x 150 x 105 cm
weight	2.5 kg

#### Measuring boxes

display	graphical / numerical
displayed data	<b>current level / minimum level,</b> accumulator capacity
radio frequency	433 MHz
transmitting power	500 mw (approved)
lighting	automatic
operating/charging time	about 9 hrs. / 3 hrs.
dimensions	225 x 165 x 100 mm
weight	2.9 kg



#### Sensors

F.A.S.T. standard	piezoceramic
sensitivity	>1.000 pC/g
fixation	permanent magnet
operating temperature	-20°C up to +60°C

Specifications are subject to change



#### Correlator

- coherence display
- AFS functionality (automatic search for filters)
- measurement on sections with varying pipe materials
- high measurement accuracy also on plastic pipes
- direct printing of measurement results; no PC required
- software updates through RS 232

#### Geophone

- functions: search for pipes and pipe bursts
- displayed data: current / minimum / average value
- adjust function: automatic setting of sensitivity
- automatic data saving process

ISO 9001:2000