



IFU GMBH

Privates Institut für Umweltanalysen

MTP-5 software controls:

- system configuration
- measurement
- data storage
- processing
- diagnostics
- auto-calibration

For live data and to see MTP-5
at work, please visit
www.mtp5.ru



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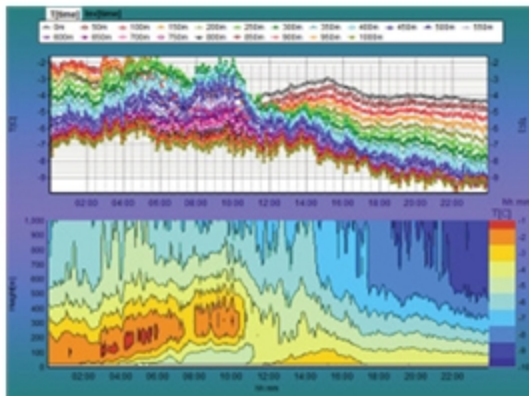


MTP-5

*AIR TEMPERATURE PROFILES
BY MICROWAVE TECHNOLOGY*



- state of the art microwave radiometer
- all-weather operation
- self-calibrating
- low operating costs
- ideal for air pollution or climatology studies



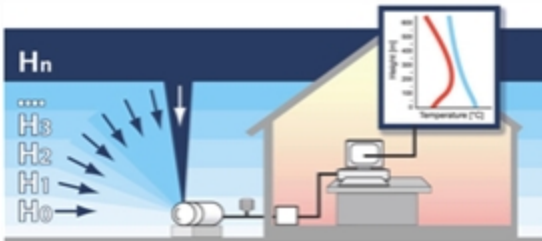
The data is stored as daily ASCII files for easy export to spreadsheets. After each scan, a graph of the (daily) temperature profile is displayed.





Measurement Principle

MTP-5 is a remote sensing instrument that measures the microwave radiation emitted from the lower 1000 m of the atmosphere, within the Planetary Boundary Layer.



The atmospheric radiation is measured by scanning in angular steps from horizontal to vertical position.

Vertical height and temperature information are provided by the operating software from the raw data.

Every 5 minutes the data is stored and profiles are displayed graphically.

*designed for
temperature inversions*

Advantages

- real-time data every 5 minutes
- reliable results under all weather conditions
- no calibration/operator needed
- quick and simple setup
- easy implementation into networks



Applications

- urban air quality monitoring
- investigation of urban heat island
- monitoring of atmospheric stability at airports (e.g. wind shear, icing and fog)
- regional and mesoscale PBL forecasting
- atmospheric chemistry research

Models

The MTP-5 family of instruments is specifically designed to provide real-time PBL measurements with all-weather, unattended operation and automatic self-calibration. They require no specialist knowledge to install, maintain and operate or to analyze the data, and are ideal for network use.

up to 1000 m

MTP-5-H

with altitude resolution of 50 m
designed for urban environments and airports

MTP-5-HE

with altitude resolution 25 to 50 m
designed for locations in a valley or close to mountains

MTP-5-RE

with improved altitude resolution, down to 10 m for the first 100 m
designed for high resolution profiles

MTP-5-PE

improved RE version
designed for arctic conditions