

ASFT LWIS

ASFTs LWIS (Light Weather Information System) is a portable, compact weather-station with the capability of fully off-grid, real-time operations and remote access.

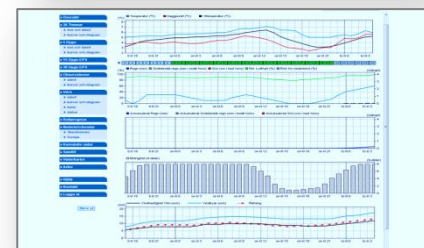
Measurement of:

- air temperature
 - relative humidity
 - air pressure
 - wind (direction and speed)
 - precipitation (type and amount)
 - possibility to customize and connect additional sensors for visibility, ground temperature, radiation etc
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- Powered by 230 VDC **or** off-grid through solar/battery-supply
 - Communication over PSTN, LAN, GPRS, GSM or Satellite



The LWIS is fully portable and can quickly be assembled and deployed. The solar panel and sealed lead acid battery ensure reliable operation in the harshest conditions. Together with communication over GPRS, GSM or Satellite the LWIS is fully off-grid and is easily and rapidly deployable at any place and immediately operational. Output is provided over a secure website and can be viewed from any internet connected computer immediately upon deployment and activation of the LWIS.

Relative humidity is measured by means of a capacitive sensor element; a precision NTC measuring element is used to measure air temperature. Ultrasonic sensor technology is used to take wind measurements. The precipitation is measured with laser-measurements and can classify precipitation and detect very fine rain, rain, sleet, snow and warn of snowdrift. In contrast to other precipitation sensors, it measures the actual geometric precipitation of snow (i.e. the actual amount of snowfall), not just the water equivalent.



Technical Specifications

Temperature	
Principle	NTC
Measuring range	-50 ... 60 °C
Unit	°C
Accuracy	±0.2°C (-20...50°C), otherwise ±0.5°C (>-30°C)

Relative humidity	
Principle	Capacitive
Measuring range	0 ... 100 % RH
Unit	% RH
Accuracy	±2% RH

Air pressure	
Principle	MEMS capacitive
Measuring range	300 ... 1200 hPa
Unit	hPa
Accuracy	±1.5hPa

Wind direction	
Principle	Ultrasonic
Measuring range	0 ... 359.9 °
Unit	°
Accuracy	±3°

Wind speed	
Principle	Ultrasonic
Measuring range	0 ... 60 m/s
Unit	m/s
Accuracy	±0.3m/s or 3% (0...35m/s)

Precipitation OpticEye MKII™	
Precipitation classification:	Fine rain, rain, snow, sleet, snow drift
Precipitation amount:	mm/h (momentous and accumulated)
Accuracy (rain):	< ± 5 %
Accuracy (snow):	< ± 20 % Geometrically amount - NOT water equivalence