

Weather Mast Hamburg, available parameteres
Parameters listed in **bold** are provided via ICDC

Air temperature at different altitudes | °C
Dewpoint temperature at different altitudes | °C
Relative humidity at different altitudes | %
Windspeed at different altitudes | m/s
Winddirection at different altitudes | °
x-, y-, z-component of the wind vector | m/s
Vertical component of the wind vector | m/s
Vertical turbulent impulse flux | N/m²
Vertical turbulent sensible heat flux | W/m²
Longitudinal-, transversal-, vertical turbulence intensity | 1
Friction velocity | m/s
Characteristic temperature | K
Monin-Obuchow-Stability parameters | 1/m
Strongest gust | m/s
Weakest wind | m/s
Maximum wind speed at 20 Hz sampling | m/s
Minimum wind speed at 20 Hz sampling | m/s
Wind direction of strongest gust | °
Wind direction of weakest wind | °
Surface friction coefficient | 1
Turbulent kinetic energy | m²/s²
Global radiation (incident short-wave radiation) | W/m²
Incident long-wave radiation | W/m²
Altitude of lowest cloud above ground | m
Total cloud coverage | %
Surface temperature | °C
Duration of precipitation | min
Duration of no precipitation | min
Precipitation amount | mm
Precipitation since 00:00 local time | mm
Air pressure in 2m altitude | hPa
Minimum daily air pressure in different altitudes | hPa
Maximum daily air pressure in different altitudes | hPa
Minimum temperature | °C
Maximum temperature | °C
Potential temperature in different altitudes | °C
Dew point temperature in different altitudes | °C
Absolute humidity | g/kg
Spezific humidity in different altitudes | g/kg
Wet bulb temperature in different altitudes | °C
Water vapor pressure in different altitudes | hPa
Solar zenith angle | °
Upper half space brightness temperature | °C
Relative global radiation | %
Duration of sunshine | min
Duration of no sunshine | min
Theoretical sunshine duration | min
Direct solar radiation | W/m²

Diffuse solar radiation | W/m^2
Outgoing short-wave radiation calculated from local albedo and global radiation | W/m^2
Outgoing long-wave radiation calculated from local emissivity and surface temperature | W/m^2
Net radiation balance | W/m^2
Long-wave radiation balance | W/m^2
Windchill temperature in different altitudes | $^{\circ}\text{C}$
Windchill temperature in shadow | $^{\circ}\text{C}$
Thermal comfort (PMV-value) | 1
Heatindex (USA) | $^{\circ}\text{C}$
Humidex (Kanada) | $^{\circ}\text{C}$
Top and bottom cloud height | m
Total cloud cover, all levels | 1/8
Precipitation duration since 00:00 local time | h
Rainrate | mm/min
Liquid water content | g/m^3
Number of rain drops / size class A bis K | number per class
Rain liquid water content / size class A bis K | g/m^3 per class
Most efficient drop size | mm
Solid precipitation | 0 or 1
Total daily precipitation amount | mm
H₂O-concentration at 50 m altitude | mmol/m^3 and g/m^3
CO₂-concentration at 50 m altitude | mmol/m^3 and g/m^3
Vertical humidity flux at 50 m altitude | mg/s m^2
CO₂ flux at 50 m altitude | mg/s m^2
Vertical latent heat flux at 50 m altitude | W/m^2
Weather-webcam | 1 frame / 1 min