

Fluid quantities – Velocity of gases

Measurement quantity / Calibration item	Range	Measurement conditions / procedure	Expanded uncertainty of measurement	Flexible accreditation
Velocity of gases Ground based remote sensing devices -Absolute value of flow vector (horizontal component)	4m/s to 16m/s	Comparison measurement according to IEC 61400-50-2:2022	$0,010 \cdot v + 0,04$ m/s	<input checked="" type="checkbox"/>
Direction of the flow vector	128° to 183°	Comparison measurement according to IEC 61400-50-2:2022	6,5°	<input checked="" type="checkbox"/>
	242° to 360°			
	0° to 29°			
Nacelle based remote sensing devices -Absolute value of flow vector (in direction of the beam)	4m/s to 16m/s	Comparison measurement according to IEC 61400-50-3:2022 Section 7	$0,012 \cdot v + 0,04$ m/s	<input checked="" type="checkbox"/>
Inclination of optical measuring beams	-3° to 3°	Comparison measurement according to IEC 61400-50-3:2022 Section 7	0,07°	<input checked="" type="checkbox"/>
Opening angle between optical measuring beams	1° to 90°	Comparison measurement according to IEC 61400-50-3:2022 Section 7	0,05°	<input checked="" type="checkbox"/>

Remarks: Test field with measuring mast, v= measured value