

Accurate visibility and present weather sensors

The **Biral HSS VPF-710 visibility sensor** can be combined with the **Thies Laser Precipitation Monitor (LPM)** to give accurate visibility data and detailed present weather information.



The Biral HSS VPF-710 visibility sensor

The Thies Laser Precipitation Monitor (LPM)

The advantages of combining these sensors

VPF-710 - the function of the VPF-710 sensor is to provide accurate visibility information (the sensor can also provide present weather codes but the number of codes are limited with lower accuracy than the LPM).

LPM - the Laser Precipitation Monitor provides complete precipitation information including liquid, freezing and frozen precipitation as well as some dry particulate but does not provide visibility information.

By combining these sensors the best choice in terms of the amount and accuracy of information is achieved. Both sensors are digital and output data in RS232 or RS422 communications formats with ASCII human readable data that is comma separated. The sensors are interfaced using the serial ports.

Biral VPF-710 visibility sensor (used on many airports)	
MOR:	10 m -75 km
Accuracy:	+/- 2 percent to 2 km +/- 10 percent up to 16 km maximum of +/- 20 percent from 16 km up to 75 km (15 percent at 20 km)
Repeatability:	+/- 3 percent
Time constant:	adjustable from 30 seconds up to 15 minutes but is standard at 60 seconds
Actuation interval:	less than 20 seconds

Biral supplied Thies LPM present weather sensor	
Precipitation sensitivity threshold:	0.005 mm/hr (instantaneous)
Precipitation intensity:	0.00 to greater than 250 mm/hr (values are displayed until 999 mm/hr)
Output codes:	METAR codes in 4678 format natively Encode: WMO 4677, 4678, 4680 tables with 1 and 5 minute averaging

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