

Sensor specifications for Australian Antarctic Division AWS deployed from January 2005.

Sensor	Type	Range	Accuracy	Resolution	Comments
Air temperature	FS23D thermistor in ratiometric circuit	<i>DomeA:</i> -10 to -99°C <i>Eagle:</i> 0 to -99°C <i>LGB69:</i> +13 to -77°C	0.05°C	0.02°C	Sensor in naturally ventilated shield. Accuracy does not include radiation errors.
Sub-surface temperatures	FS23D thermistor in ratiometric circuit	<i>DomeA:</i> -10 to -99°C <i>Eagle:</i> 0 to -99°C <i>LGB69:</i> +13 to -77°C	0.05°C	0.02°C	
Relative humidity	Vaisala HMP35D	0 to 100%	2%(RH<90%) 3%(RH>90%)	2%	
Air pressure	Paroscientific Digiquartz 6015A	<i>DomeA:</i> 530 to 610 hPa <i>Eagle:</i> 635 to 735 hPa <i>LGB69:</i> 691 to 791 hPa	0.2 hPa	0.1 hPa	Accuracy does not include wind effects.
Wind speed	3-cup anemometer with R M Young 12170C cup set, and AAD built body and mechanism	0 to 51 m/s	0.5 m/s	0.1 m/s	Anemometers may stall in very cold conditions or with hoar frost deposition.
Wind direction	<i>Dome A, Eagle,:</i> Aanderaa 3590B wind vane <i>LGB69:</i> Aanderaa 2750	0 to 360 degrees	6 degrees	6 degrees	Wind vane may seize in very cold conditions.
Global radiation	Middleton EP08 pyranometer	305 to 2850 nm (50% points). 0 to 205 MJ	5%	0.1 MJ	Does not include errors due to hoar frost or snow.
Snow height	Campbell SR50 acoustic ranger	0.5 - 10 m	0.01 m or 0.4%	0.02 m	Maximum range is height of mast.