

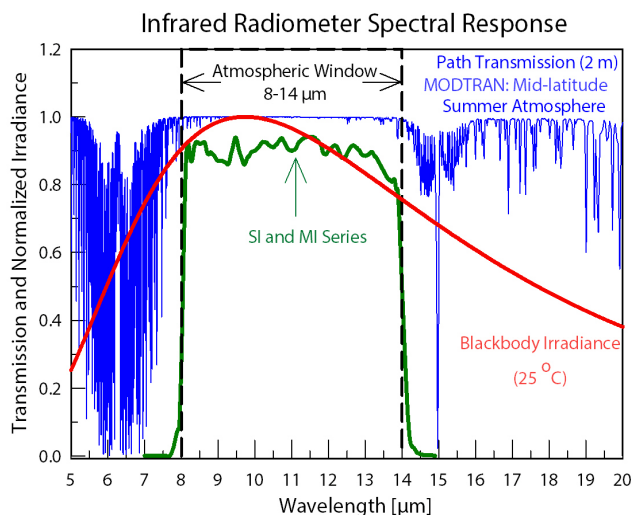


Infrared Radiometers

High-accuracy, non-contact surface temperature measurement

Accurate Measurements

Calibrated to a custom black-body cone with a measurement uncertainty of ± 0.2 C from -30 to 65 C when the sensor (detector) temperature is within 20 C of the surface (target) being measured. Radiometers are only sensitive from $8-14$ μm (atmospheric window) to minimize the influence of water vapor and CO_2 on the measurement.



Above: Spectral response of Apogee SI-100 and SI-400 infrared radiometers compared to atmospheric transmittance and blackbody irradiance.

Field of View Options

Four field of view (FOV) options, including: three circular and one horizontal aperture. Custom FOVs available upon request.



Rugged Housing

Anodized aluminum body with fully-potted electronics. The radiation shield reduces thermal fluctuations.

High Speed Options

Standard models (SI) have a response time of 0.6 seconds. New fast response models (SIF) have a 0.2 second response time.

Typical Applications

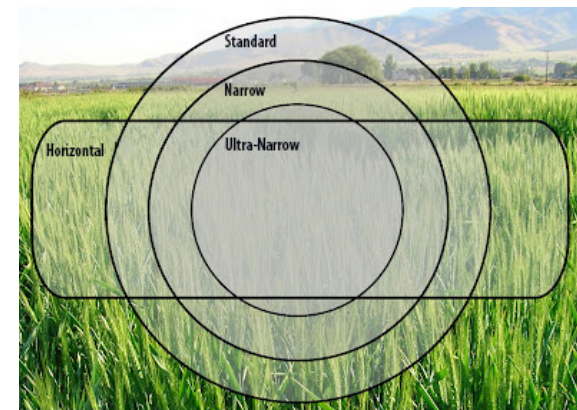
Plant canopy temperature measurement for use in plant water status estimation, road surface temperature measurement for determination of icing conditions, and terrestrial surface (soil, vegetation, water, snow) temperature measurement in energy balance studies.

Mounting

The AM-210 mounting bracket is designed to orient sensors at varying angles to satisfy all applications. Bracket can be mounted to a mast or pipe, while accommodating the sensor.



AM-210



Above: Field of View Simulation

