

## Nomenclature

A	Surface area ( $\text{m}^2$ ), Coefficient used in autoregression analysis (-)
$A_B$	Gain corresponding to change in bias voltage ( $\text{Wm}^{-2}\text{sr}^{-1}/\text{V}$ )
$A_D$	Gain corresponding to change in DAC voltage ( $\text{Wm}^{-2}\text{sr}^{-1}/\text{V}$ )
$A_H$	Gain corresponding to change in heatsink temperature ( $\text{Wm}^{-2}\text{sr}^{-1}/\text{K}$ )
$A_S$	Gain corresponding to a drift in signal output ( $\text{Wm}^{-2}\text{sr}^{-1}/\text{count}$ )
$A_V$	Gain corresponding to change in output signal ( $\text{Wm}^{-2}\text{sr}^{-1}/\text{count}$ )
B	Thermistor temperature coefficient of resistance (K)
C	Electrical capacitance ( $\mu\text{f}$ ), Digital-to-Analog conversion factor (409.5 counts/V), Ideal instrument response shape (-)
$C_1$	Constant used in Planck's radiation distribution function ( $5.9544 \times 10^8 \text{ W}\mu\text{m}^4\text{m}^{-2}$ )
$C_2$	Constant used in Planck's radiation distribution function ( $1.4338 \times 10^4 \mu\text{mK}$ )
$D_{ijk}$	Monochromatic radiation distribution factor (-)
e	Emissive power (W)
f	Frequency (Hz)
F	Radiative flux ( $\text{Wm}^{-2}$ )
G	Radiometric gain ( $\text{Wm}^{-2}\text{sr}^{-1}/\text{count}$ )
I	Electrical current (A), Scene spectral weighting (-)
k	Thermal conductivity ( $\text{Wm}^{-1}\text{K}^{-1}$ )

L	Unfiltered radiance ( $\text{Wm}^{-2}\text{sr}^{-1}$ )
$\tilde{L}$	Filtered radiance ( $\text{Wm}^{-2}\text{sr}^{-1}$ )
m	Instrument output (counts), Number of discretized wavelength intervals (-)
n	Number of surfaces in an enclosure (-)
o	Zero-radiance scan dependent offset (counts)
p	Optical point spread function (-), Power (W), Coefficient in slow mode filtering algorithm (-)
Q	Power (W)
R	Angular dependence model (-), Electrical resistance ( $\Omega$ ), Responsivity ( $\text{VW}^{-1}$ ), Nondimensional response (-)
S	Spectral response (-)
t	Time (s)
T	Temperature (K)
u	Normalized ideal first-order instrument response (-)
v	Normalized slow mode instrument response (-)
$V_{\text{bias}}$	Instrument bridge bias voltage (V)
$V_{\text{D}}$	Digital-to-Analog converter voltage (V)
w	Normalized measured instrument response (-)

### **Greek**

$\alpha$	Absorptivity (-)
$\epsilon$	Emissivity (-)
$\phi$	Azimuthal angle (rad)
$\eta$	Elevation scan angle (deg)
$\kappa$	Magnitude of slow mode (%)
$\lambda$	Wavelength ( $\mu\text{m}$ ), Characteristic time of slow response mode ( $\text{s}^{-1}$ )

$\lambda_{\text{corr}}$	Spectral correction factor (-)
$\pi$	Pi (3.14159)
$\theta$	Zenith angle (rad)
$\rho$	Reflectivity (-)
$\sigma$	Variance of recovered radiance ( $\text{Wm}^{-2}\text{sr}^{-1}$ )
$\tau$	Time constant (ms), Time lag between instrument optical axis and centroid of the instrument point spread function (s), Transmittance (-)
$\Omega$	Field-of-view solid angle (sr)
$\xi$	Elevation cross-scan angle (deg)
$\Psi$	Point spread function centroid (deg)