# Main equations

Here an equation

$$\dot{Q} = k \cdot A \cdot \Delta T \tag{1}$$

or another one

$$\frac{1}{k} = \left[ \frac{1}{\alpha_{i} r_{i}} + \sum_{j=1}^{n} \frac{1}{\lambda_{j}} \ln \frac{r_{a,j}}{r_{i,j}} + \frac{1}{\alpha_{a} r_{a}} \right] \cdot r_{\text{reference}}$$
 (2)

## Nomenclature

#### Latin Letters

A	area	$\mathrm{m}^2$	
k	overall heat transfer coefficient	$W/(m^2K)$	see eq. $(2)$
L	length	m	SI base quantity
$\dot{Q}$	heat flux	W	
$\Delta T$	temperature difference	K	SI base quantity
T	temperature	K	SI base quantity

#### **Greek Letters**

 $\begin{array}{ll} \alpha & \mbox{convection heat transfer coefficient} & W/(m^2K) \\ \lambda & \mbox{thermal conductivity} & W\,K^{-1} \end{array}$ 

### Subscripts

- a out
- $i \hspace{0.5cm} \text{in} \hspace{0.5cm}$
- j running parameter
- n number of walls