



Submodules
monolithic sensi-
tivities

$$\mathbf{H} = \begin{bmatrix} 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 1 & 0 \\ 0 & 1 \\ 0 & 1 \\ 0 & 1 \\ 0 & 1 \end{bmatrix}$$

$$\begin{aligned} \frac{\partial(\cdot)_i}{\partial \bar{\mathbf{a}}_{t=0}} &= \boxed{1} \times \boxed{\frac{\partial(\cdot)_i}{\partial \mathbf{a}^0}} + \boxed{1} \times \boxed{\frac{\partial(\cdot)_i}{\partial \mathbf{a}^1}} + \boxed{1} \times \boxed{\frac{\partial(\cdot)_i}{\partial \mathbf{a}^2}} + \boxed{1} \times \boxed{\frac{\partial(\cdot)_i}{\partial \mathbf{a}^3}} \\ &\quad \boxed{0} \times \boxed{\frac{\partial(\cdot)_i}{\partial \mathbf{a}^4}} + \boxed{0} \times \boxed{\frac{\partial(\cdot)_i}{\partial \mathbf{a}^5}} + \boxed{0} \times \boxed{\frac{\partial(\cdot)_i}{\partial \mathbf{a}^6}} + \boxed{0} \times \boxed{\frac{\partial(\cdot)_i}{\partial \mathbf{a}^7}} \end{aligned}$$