

Name: APEG__222V01**Description:****Type:** Earth station, Receiving and Transmitting

Earth station antenna pattern submitted by G for network INMARSAT earth station type INM-B.

Required Input Parameters:

gain

Validation Warnings/Errors:

Type	Message
Error	Gmax () is less than 18 (). Gmax is too low.

Co-Polar Component:

$$G = G_{\max} \quad \text{for } 0^\circ \leq \varphi < 10^\circ$$

$$G = 18 \quad \text{for } 10^\circ \leq \varphi < 16^\circ$$

$$G = 8 \quad \text{for } 16^\circ \leq \varphi < \varphi_r$$

$$G = \text{CoefA} - \text{CoefB} * \log \varphi \quad \text{for } \varphi_r \leq \varphi < \varphi_b$$

$$G = G_{\min} \quad \text{for } \varphi_b \leq \varphi \leq 180^\circ$$

where:

$$\varphi_r = 10^{\left(\frac{33}{25}\right)} (21^\circ)$$

$$\varphi_b = 10^{\left(\frac{44}{25}\right)} (57^\circ)$$

$$\text{CoefA} = 41$$

$$\text{CoefB} = 25$$

$$G_{\min} = -3$$