

Name: APEG__216V01**Description:****Type:** Earth station, Receiving and Transmitting

Earth station antenna pattern submitted by G for network INMARSAT earth station type Typical-0.4M.

Required Input Parameters:

gain

Validation Warnings/Errors:

Type	Message
Error	Gmax () is less than 11 (). Gmax is too low.

Co-Polar Component:

$$\begin{aligned}
 G &= G_{\max} && \text{for } 0^\circ \leq \varphi < \varphi_1 \\
 G &= G_1 && \text{for } \varphi_1 \leq \varphi < \varphi_r \\
 G &= \text{CoefA} - \text{CoefB} * \log \varphi && \text{for } \varphi_r \leq \varphi < \varphi_b \\
 G &= G_{\min} && \text{for } \varphi_b \leq \varphi \leq 180^\circ
 \end{aligned}$$

where:

$$\varphi_1 = 18^\circ$$

$$\varphi_r = 30^\circ$$

$$\varphi_b = 10^{\left(\frac{47}{25}\right)} (76^\circ)$$

$$G_1 = 11$$

$$\text{CoefA} = 44$$

$$\text{CoefB} = 25$$

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