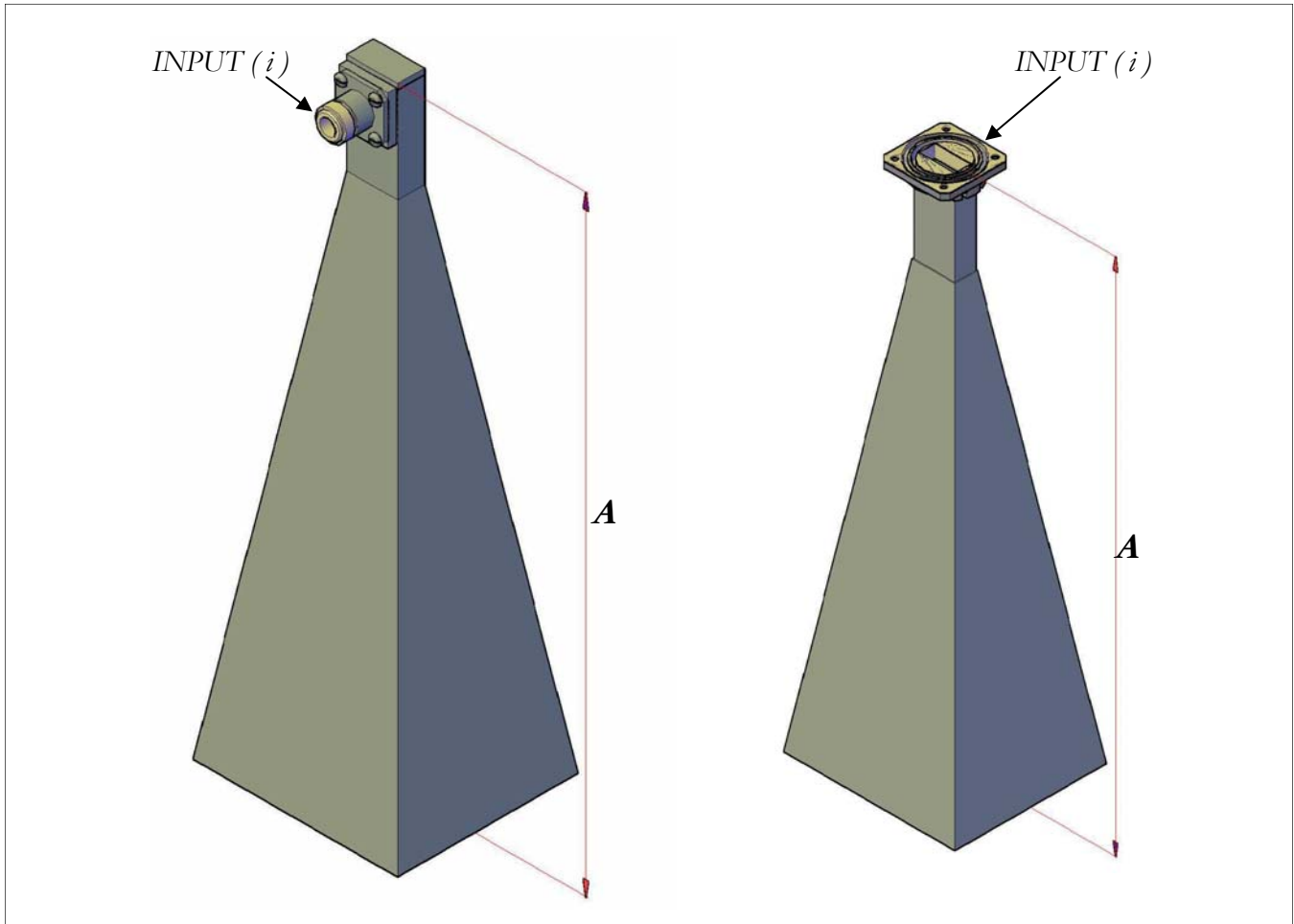


Rectangular Waveguide Standard Gain Horns



Space Machine offers a product line of standard gain horns covering waveguide sizes WR28 thru WR975. VSWR is 1.30:1 with connector input, 1.20:1 with flange input. Gain is ± 1 dB maximum. See next page for dimensions. Additional sizes and configurations are available upon request.

Ordering Information:

**Waveguide Standard Gain Horn, WR112,
Brass, SMA Female Input, Chromated,
Paint Space Machine Gray.**

Example part number: **WSH** **wr** **-m** **i** **-p** **f**
WSH 112 -B SF -C P

Series (WSH):

Waveguide Size (wr): WR28 thru WR975

Material (-m): A – Aluminum, B – Brass, C – OFHC Copper, O – Other

Input (i): Connector (See [Appendix E](#))
Flange (See [Appendix G](#))

Plating (-p): C – Chromate, S – Silver, G – Gold, O – Other, N – None

Finish (f): P – Paint Space Machine Gray, N – None, O – Other

Rectangular Waveguide Standard Gain Horn Dimensions

| Model | WR # | Frequency (GHz) | Gain* (dB) | A |
|--------------|-------------|----------------------------|-----------------------|----------|
| WSH28- | 28 | 26.50 – 40.00 | 24.7 | 6.67 |
| WSH34- | 34 | 22.00 – 33.00 | 24.7 | 9.21 |
| WSH42- | 42 | 18.00 – 26.50 | 24.7 | 9.50 |
| WSH51- | 51 | 15.00 – 22.00 | 24.7 | 13.38 |
| WSH62- | 62 | 12.40 – 18.00 | 24.7 | 14.41 |
| WSH75- | 75 | 10.00 – 15.00 | 25.0 | 17.50 |
| WSH90- | 90 | 8.20 – 12.40 | 22.1 | 13.41 |
| WSH112- | 112 | 7.05 – 10.00 | 18.0 | 7.45 |
| WSH137- | 137 | 5.85 – 8.20 | 22.1 | 19.07 |
| WSH159- | 159 | 4.90 – 7.05 | 18.0 | 9.45 |
| WSH187- | 187 | 3.95 – 5.85 | 18.0 | 12.25 |
| WSH229- | 229 | 3.30 – 4.90 | 18.0 | 13.50 |
| WSH284- | 284 | 2.60 – 3.95 | 18.0 | 18.00 |
| WSH340- | 340 | 2.20 – 3.30 | 18.0 | 13.00 |
| WSH430- | 430 | 1.70 – 2.60 | 15.5 | 15.00 |
| WSH510- | 510 | 1.45 – 2.20 | 15.5 | 17.50 |
| WSH650- | 650 | 1.12 – 1.70 | 15.5 | 22.80 |
| WSH770- | 770 | 0.96 – 1.45 | 13.7 | 24.80 |
| WSH975- | 975 | 0.75 – 1.12 | 13.7 | 24.50 |

*Nominal gain at midband.