



WR-112 Standard Gain Horn Antenna Operates From 7.05 GHz to 10 GHz With a Nominal 10 dB Gain N Female Input Connector

TECHNICAL DATA SHEET

PE9858/NF-10

**WR-112 Standard Gain Horn Antenna Operates From 7.05 GHz to 10 GHz With a Nominal 10 dB Gain N Female Input Connector**

**Configuration**

|                      |                           |
|----------------------|---------------------------|
| Design               | WR-112 Standard Gain Horn |
| Frequency Range, GHz | 7.05 to 10                |
| Polarization         | Linear                    |
| Interface 1          | N Female                  |

**Electrical Specifications**

|                    |        |
|--------------------|--------|
| Impedance, Ohms    | 50     |
| Nominal Gain, dB   | 10     |
| Maximum Input VSWR | 1.25:1 |

**Mechanical Specifications**

**Size**

|                 |               |
|-----------------|---------------|
| Length, in [mm] | 4.02 [102.11] |
| Width, in [mm]  | 1.875 [47.63] |
| Height, in [mm] | 2.47 [62.74]  |

**Compliance Certifications** (visit [www.Pasternack.com](http://www.Pasternack.com) for current document)

**Plotted and Other Data**

|                           |                            |
|---------------------------|----------------------------|
| 2 Dimensional OML Drawing | PE9858/NF                  |
| Notes:                    | Values at 25 °C, sea level |

WR-112 Standard Gain Horn Antenna Operates From 7.05 GHz to 10 GHz With a Nominal 10 dB Gain N Female Input Connector from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-112 Standard Gain Horn Antenna Operates From 7.05 GHz to 10 GHz With a Nominal 10 dB Gain N Female Input Connector PE9858/NF-10](http://www.pasternack.com/standard-gain-horn-waveguide-size-wr112-10-db-gain-n-female-pe9858nf-10-p.aspx)

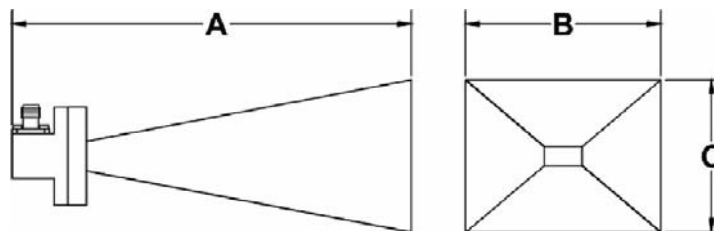
URL: <http://www.pasternack.com/standard-gain-horn-waveguide-size-wr112-10-db-gain-n-female-pe9858nf-10-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Pasternack reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal.



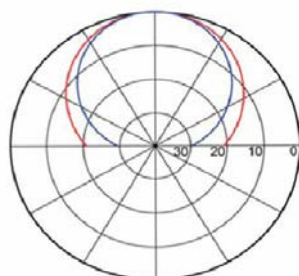
# PE9858/NF-10 CAD Drawing

WR-112 Standard Gain Horn Antenna Operates From 7.05 GHz to 10 GHz With a Nominal 10 dB Gain N Female Input Connector

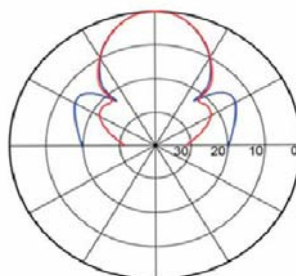


## Specifications <sup>(1)</sup> & Ordering Information

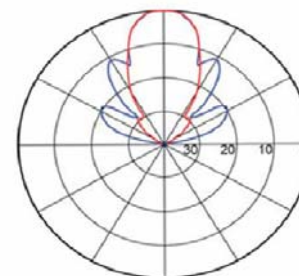
| *N CONNECTOR MODEL NO.                       | Description  | WAVEGUIDE SIZE | FREQUENCY RANGE (DC TO GHz) | GAIN                    | 3 dB Width              |                         | Dimensions              |                        |                       |
|--|--|----------------|-----------------------------|-------------------------|-------------------------|-------------------------|-------------------------|------------------------|-----------------------|
|  |  |                |                             |                         | E-Plane                 | H-Plane                 | A                       | B                      | C                     |
| PE9854/NF-10<br>PE9854/NF-15<br>PE9854/NF-20 | WR62 Standard Gain Horn with N Female Connector 10, 15 & 20 dB Gain  | WR62           | 12.40-18.00                 | 10 dB<br>15 dB<br>20 dB | 55.3°<br>30.1°<br>18.8° | 50.9°<br>31.2°<br>18.9° | 2.00<br>3.48<br>6.80    | 1.16<br>1.88<br>3.00   | 0.82<br>1.47<br>2.24  |
| PE9855/NF-10<br>PE9855/NF-15<br>PE9855/NF-20 | WR75 Standard Gain Horn with N Female Connector 10, 15 & 20 dB Gain  | WR75           | 10.00-15.00                 | 10 dB<br>15 dB<br>20 dB | 50.2°<br>35.4°<br>16.3° | 49.2°<br>28.5°<br>17.2° | 2.88<br>5.70<br>8.85    | 1.39<br>2.36<br>4.00   | 1.04<br>1.45<br>3.10  |
| PE9856/NF-10<br>PE9856/NF-15<br>PE9856/NF-20 | WR90 Standard Gain Horn with N Female Connector 10, 15 & 20 dB Gain  | WR90           | 8.20-12.40                  | 10 dB<br>15 dB<br>20 dB | 48.5°<br>29.3°<br>16.1° | 47.4°<br>29.0°<br>16.5° | 2.82<br>6.45<br>11.06   | 1.70<br>2.80<br>5.00   | 1.27<br>2.05<br>3.70  |
| PE9857/NF-10<br>PE9857/NF-15<br>PE9857/NF-20 | WR102 Standard Gain Horn with N Female Connector 10, 15 & 20 dB Gain | WR102          | 7.00-11.00                  | 10 dB<br>15 dB<br>20 dB | 55.5°<br>29.6°<br>17.0° | 54.1°<br>29.3°<br>16.7° | 4.13<br>7.28<br>12.28   | 1.69<br>3.15<br>5.68   | 1.27<br>2.36<br>4.04  |
| PE9858/NF-10<br>PE9858/NF-15<br>PE9858/NF-20 | WR112 Standard Gain Horn with N Female Connector 10, 15 & 20 dB Gain | WR112          | 7.05-10.00                  | 10 dB<br>15 dB<br>20 dB | 56.8°<br>32.4°<br>19.3° | 55.2°<br>32.0°<br>19.3° | 4.02<br>7.79<br>12.27   | 1.75<br>3.05<br>5.10   | 1.30<br>2.25<br>3.77  |
| PE9859/NF-10<br>PE9859/NF-15<br>PE9859/NF-20 | WR137 Standard Gain Horn with N Female Connector 10, 15 & 20 dB Gain | WR137          | 5.85-8.20                   | 10 dB<br>15 dB<br>20 dB | 55.1°<br>33.7°<br>18.7° | 54.2°<br>33.2°<br>18.8° | 4.41<br>7.80<br>13.45   | 2.15<br>3.53<br>6.45   | 1.60<br>2.60<br>4.65  |
| PE9860/NF-10<br>PE9860/NF-15<br>PE9860/NF-20 | WR159 Standard Gain Horn with N Female Connector 10, 15 & 20 dB Gain | WR159          | 4.90-7.05                   | 10 dB<br>15 dB<br>20 dB | 59.8°<br>31.3°<br>14.3° | 48.3°<br>30.8°<br>16.9° | 5.91<br>9.53<br>13.25   | 2.81<br>4.43<br>10.00  | 1.70<br>3.27<br>7.80  |
| PE9861/NF-10<br>PE9861/NF-15<br>PE9861/NF-20 | WR187 Standard Gain Horn with N Female Connector 10, 15 & 20 dB Gain | WR187          | 3.95-5.85                   | 10 dB<br>15 dB<br>20 dB | 55.0°<br>33.8°<br>18.9° | 54.1°<br>33.3°<br>19.2° | 17.51<br>11.28<br>16.88 | 3.29<br>4.98<br>9.07   | 2.19<br>3.67<br>6.70  |
| PE9862/NF-10<br>PE9862/NF-15<br>PE9862/NF-20 | WR229 Standard Gain Horn with N Female Connector 10, 15 & 20 dB Gain | WR229          | 3.30-4.90                   | 10 dB<br>15 dB<br>20 dB | 58.6°<br>32.7°<br>17.1° | 51.9°<br>32.4°<br>16.7° | 17.98<br>7.05<br>25.63  | 3.71<br>6.63<br>12.40  | 2.73<br>6.00<br>8.75  |
| PE9863/NF-10<br>PE9863/NF-15<br>PE9863/NF-20 | WR284 Standard Gain Horn with N Female Connector 10, 15 & 20 dB Gain | WR284          | 2.60-3.95                   | 10 dB<br>15 dB<br>20 dB | 50.8°<br>31.0°<br>17.2° | 54.1°<br>30.6°<br>16.5° | 10.00<br>23.25<br>32.25 | 4.40<br>9.00<br>15.70  | 3.58<br>5.60<br>10.80 |
| PE9864/NF-10<br>PE9864/NF-15<br>PE9864/NF-20 | WR430 Standard Gain Horn with N Female Connector 10, 15 & 20 dB Gain | WR430          | 1.70-2.60                   | 10 dB<br>15 dB<br>20 dB | 64.8°<br>33.1°<br>17.3° | 45.4°<br>32.0°<br>17.4° | 14.00<br>26.60<br>44.00 | 8.15<br>11.85<br>22.25 | 4.14<br>8.50<br>16.20 |



— Typical Pattern, E-Plane  
— Typical Pattern, H-Plane  
10 dBi



— Typical Pattern, E-Plane  
— Typical Pattern, H-Plane  
15 dBi



— Typical Pattern, E-Plane  
— Typical Pattern, H-Plane  
20 dBi

(1) Pasternack reserves the right to change specifications or information without notice.

(2) All Specifications "typical"

[www.pasternack.com](http://www.pasternack.com)