

## Overview of the R&S<sup>®</sup> NRP-Zxx power sensors

Sensor type R&S <sup>®</sup>	Frequency range	Power range, max. average power / peak envelope power	Connector type
<b>Universal power sensors</b>			
NRP-Z11	10 MHz to 8 GHz	200 pW to 200 mW (–67 dBm to +23 dBm) max. 400 mW (AVG) / 1 W (PK, 10 μs)	N
NRP-Z21	10 MHz to 18 GHz	200 pW to 200 mW (–67 dBm to +23 dBm) max. 400 mW (AVG) / 1 W (PK, 10 μs)	N
NRP-Z31	10 MHz to 33 GHz	200 pW to 200 mW (–67 dBm to +23 dBm) max. 400 mW (AVG) / 1 W (PK, 10 μs)	3.50 mm
NRP-Z41	50 MHz to 40 GHz	200 pW to 100 mW (–67 dBm to +20 dBm) max. 200 mW (AVG) / 1 W (PK, 10 μs)	2.92 mm
NRP-Z61	50 MHz to 50 GHz	200 pW to 100 mW (–67 dBm to +20 dBm) max. 200 mW (AVG) / 1 W (PK, 10 μs)	2.40 mm
NRP-Z211	10 MHz to 8 GHz	1.0 nW to 100 mW (–60 dBm to +20 dBm) max. 400 mW (AVG) / 2 W (PK, 10 μs)	N
NRP-Z221	10 MHz to 18 GHz	1.0 nW to 100 mW (–60 dBm to +20 dBm) max. 400 mW (AVG) / 2 W (PK, 10 μs)	N
NRP-Z22	10 MHz to 18 GHz	2 nW to 2 W (–57 dBm to +33 dBm) max. 3 W (AVG) / 10 W (PK, 10 μs)	N
NRP-Z23	10 MHz to 18 GHz	20 nW to 15 W (–47 dBm to +42 dBm) max. 18 W (AVG) / 100 W (PK, 10 μs)	N
NRP-Z24	10 MHz to 18 GHz	60 nW to 30 W (–42 dBm to +45 dBm) max. 36 W (AVG) / 300 W (PK, 10 μs)	N
<b>Wideband power sensors</b>			
NRP-Z81	50 MHz to 18 GHz	1 nW to 100 mW (–60 dBm to +20 dBm) max. 200 mW (AVG) / 1 W (PK, 1 μs)	N
NRP-Z85	50 MHz to 40 GHz	1 nW to 100 mW (–60 dBm to +20 dBm) max. 200 mW (AVG) / 1 W (PK, 1 μs)	2.92 mm
NRP-Z86 model .40	50 MHz to 40 GHz	1 nW to 100 mW (–60 dBm to +20 dBm) max. 200 mW (AVG) / 1 W (PK, 1 μs)	2.40 mm
NRP-Z86 model .44	50 MHz to 44 GHz	1 nW to 100 mW (–60 dBm to +20 dBm) max. 200 mW (AVG) / 1 W (PK, 1 μs)	2.40 mm
<b>Thermal power sensors</b>			
NRP-Z51 model .03	DC to 18 GHz	300 nW to 100 mW (–35 dBm to +20 dBm) max. 300 mW (AVG) / 20 W (PK, 1 μs)	N
NRP-Z52	DC to 33 GHz	300 nW to 100 mW (–35 dBm to +20 dBm) max. 300 mW (AVG) / 10 W (PK, 1 μs)	3.50 mm
NRP-Z55 model .03	DC to 40 GHz	300 nW to 100 mW (–35 dBm to +20 dBm) max. 300 mW (AVG) / 10 W (PK, 1 μs)	2.92 mm
NRP-Z55 model .04	DC to 44 GHz	300 nW to 100 mW (–35 dBm to +20 dBm) max. 300 mW (AVG) / 10 W (PK, 1 μs)	2.92 mm
NRP-Z56	DC to 50 GHz	300 nW to 100 mW (–35 dBm to +20 dBm) max. 300 mW (AVG) / 10 W (PK, 1 μs)	2.40 mm
NRP-Z57	DC to 67 GHz	300 nW to 100 mW (–35 dBm to +20 dBm) max. 300 mW (AVG) / 10 W (PK, 1 μs)	1.85 mm
NRP-Z58	DC to 110 GHz	300 nW to 100 mW (–35 dBm to +20 dBm) max. 300 mW (AVG) / 10 W (PK, 1 μs)	1.00 mm
<b>Average power sensors</b>			
NRP-Z91	9 kHz to 6 GHz	200 pW to 200 mW (–67 dBm to +23 dBm) max. 400 mW (AVG) / 1 W (PK, 10 μs)	N
NRP-Z92	9 kHz to 6 GHz	2 nW to 2 W (–57 dBm to +33 dBm) max. 3 W (AVG) / 10 W (PK, 10 μs)	N