

RF Peak Power Sensors

Real-Time with USB

RFP3000 Series

Company	B&K Precision						Keysight					Rohde & Schwarz			
Model	RFP3006	RFP3008	RFP3018	RFP3040	RFP3118	RFP3140	U2063XA	U2044XA	U2042XA	U2021XA	U2022XA	NRP-Z81	NRP-Z85	NRP-Z86.40	NRP-Z86.44
List price	\$6,995	\$7,995	\$6,795	\$7,595	\$6,795	\$7,595	\$8,442	\$7,325	\$6,324	\$8,492	\$8,999	\$7,985	\$8,390	\$8,140	\$8,700
Type	Peak						Peak					Wideband			
RF Characteristics															
Frequency	High	6 GHz	8 GHz	18 GHz	40 GHz	18 GHz	40 GHz	33 GHz	18 GHz	6 GHz	18 GHz	40 GHz	18 GHz	40 GHz	
	Low	50 MHz						40 MHz	10 MHz			50 MHz		50 MHz	
Power	High	+20 dBm						+26 dBm			+20 dBm		+20 dBm		
	Low*	-60/-50	-60/-50 ¹ -53/-43 ²	-34/-24		-50/-40		-70/-40			-45/-35		-60/-17		
Trigger Range	-38 to +20 dBm		-10 to +20 dBm		-27 to +20 dBm		-25 to +26 dBm			-20 to 20 dBm		-30 to +20 dBm			
VBW	0.35/195 MHz	0.35/165 MHz	0.35/70 MHz		0.35/6 MHz		0.3/5 MHz			5/30 MHz		0.3/30 MHz			
VBW, single shot	35 MHz						6 MHz			5 MHz		30 MHz		30 MHz	
Rise Time	3 ns	4 ns	5 ns		100 ns		100 ns			13 ns		13 ns			
Readings	100 k per second						25 k/s ³ (50 k avg)			25 k/s ⁴		9800 per second			
Sample Rate	100 MSPS						20 MSPS			80 MSPS		80 MSPS			
Effective Sampling Rate	10 GSPS						20 MSPS			80 MSPS		80 MSPS			
Time Resolution	100 ps						50 ns			12.5 ns		12.5 ns			
Minimum Pulse Width	10 ns				200 ns		250 ns			50 ns		50 ns			
Maximum PRF	50 MHz						2 MHz ⁵			10 MHz ⁵		10 MHz			
Maximum Capture Time	Virtually unlimited with MBuffer Mode						6.5 ms full rate			1.2 ms full rate		Up to 1 s			
Warranty	3 Years						3 Years					3 Years			

* x/y = x is in CW or the lowest VBW setting, y is at max VBW

- 1 From 50 MHz to 6 GHz
- 2 > 6 GHz to 8 GHz
- 3 Only for first 200 measurements
- 4 Only for first 100 measurements
- 5 Only 10 samples per period

B&K Precision employs unique Real-time power processing

Rohde & Schwarz and Keysight use SCPI, B&K Precision require drivers on host
Rohde & Schwarz and Keysight have S-parameter and gamma correction

Keysight includes internal zeroing on their sensors U202xXA only offer external triggering in avg mode

To externally trigger, Rohde & Schwarz requires NRP2 base unit, Rohde & Schwarz® NRP-Z3 USB, adapter cable or Rohde & Schwarz® NRP-Z5 USB sensor hub