

Specifications of the USB peak/average power Sensor

Specifications		
Frequency range	S87236D	50 MHz-18 GHz
	S87236E	50 MHz-26.5 GHz
	S87236F	50 MHz-40 GHz
	S87236L	500 MHz-67 GHz
Power range ^(note 1)	S87236D/F	Normal@ModeMode -30 dBm-+20 dBm (50 MHz≤f < 500 MHz) -35 dBm-+20 dBm (f≥500 MHz)
		Average mode -45 dBm-+20 dBm
	S87236L	Normal@ModeMode -35 dBm-+20 dBm (500 MHz≤f≤40 GHz) -30 dBm-+20 dBm (40 GHz < f≤67 GHz)
		Average mode -45 dBm-+20 dBm (500 MHz≤f≤40 GHz) -40 dBm-+20 dBm (40 GHz < f≤67 GHz)
Max. input power	+23 dBm (average power); +30 dBm (peak power, duration < 1 μs)	
Rise/fall time ^(note 2)	13ns	
Maximum sampling rate	80MSamples/sec, continuous sampling	
VBW	≥30 MHz	
Single capture bandwidth	≥30 MHz	
Min. pulse width	50ns	
Average power measurement accuracy ^(note 3)	S87236D	±0.20 dB (±4.7%)
	S87236E	±0.25 dB (±5.9%)
	S87236F	±0.30 dB (±7.2%)
	S87236L	±0.33 dB (±7.9%)
Maximum capture length	1 s (down frequency)	
	1.2ms (maximum sampling rate)	
Maximum pulse repetition frequency	10 MHz	
Max Voltage Standing Wave Ratio	S87236D	1.20 (50 MHz≤f≤2 GHz)
		1.26 (2 GHz<f≤18 GHz)

	S87236E	1.20 (50 MHz ≤ f ≤ 2 GHz)
		1.26 (2 GHz < f ≤ 18 GHz)
		1.35 (18 GHz < f ≤ 26.5 GHz)
	S87236F	1.20 (50 MHz ≤ f ≤ 2 GHz)
		1.26 (2 GHz < f ≤ 18 GHz)
		1.35 (18 GHz < f ≤ 26.5 GHz)
		1.50 (26.5 GHz < f ≤ 40 GHz)
	S87236L	1.20 (500 MHz ≤ f ≤ 2 GHz)
		1.26 (2 GHz < f ≤ 18 GHz)
		1.35 (18 GHz < f ≤ 26.5 GHz)
		1.50 (26.5 GHz < f ≤ 40 GHz)
		1.70 (40 GHz < f ≤ 67 GHz)
Calibration uncertainty	S87236D	0.17 dB (4.0%) (50 MHz ≤ f ≤ 10 GHz)
		0.19 dB (4.5%) (10 GHz < f ≤ 18 GHz)
	S87236E	0.18 dB (4.2%) (50 MHz ≤ f ≤ 1 GHz)
		0.19 dB (4.5%) (1 GHz < f ≤ 18 GHz)
		0.22 dB (5.2%) (18 GHz < f ≤ 26.5 GHz)
	S87236F	0.18 dB (4.2%) (50 MHz ≤ f ≤ 1 GHz)
		0.19 dB (4.5%) (1 GHz < f ≤ 18 GHz)
		0.22 dB (5.2%) (18 GHz < f ≤ 26.5 GHz)
		0.24 dB (5.7%) (26.5 GHz < f ≤ 40 GHz)
	S87236L	0.19 dB (4.5%) (500 MHz ≤ f ≤ 18 GHz)
		0.22 dB (5.2%) (18 GHz < f ≤ 26.5 GHz)
		0.24 dB (5.7%) (26.5 GHz < f ≤ 40 GHz)
0.29 dB (6.9%) (40 GHz < f ≤ 67 GHz)		
Connector	S87236D	N-Type(m)
	S87236E	3.5mm(m)
	S87236F	2.4mm(m)
	S87236L	1.85mm(m)
Time base and trigger		
Horizontal scale	2 ns/div-100 ms/div	
Internal trigger (typical)	-20 dBm-+20 dBm	

Trigger delay	± 1.0s (maximum)	
Trigger Holdoff	1 μs-1 s	
Trigger Hysteresis	0 dB-10 dB	
Input and output		
Trigger input interface	MMCX connector is TTL-compatible and used for external trigger input	
Trigger output interface	MMCX connector is TTL-compatible and used for trigger sync output	
Programmed control interface	USB2.0 interface, USB-TMC compatible	
Maximum measurement speed	50,000 readings per second	
Product characteristics		
Display	Host computer display	
Operating interface language	Chinese/English	
Power supply requirement	+5 V, 500 mA	
Operating temperature range	-10°C-50°C	
Saving temperature	-40°C-+70°C	
Weight	≤0.30 kg (excluding accessories and packaging)	
Boundary dimension (Width×Height×Depth)	S87236D	141.1mm×52.0mm×34.0mm
	S87236E	133.9mm×52.0mm×34.0mm
	S87236F	124.7mm×52.0mm×34.0mm
	S87236L	124.7mm×52.0mm×34.0mm
Recommended calibration cycle	12 months	
Host computer		
Operating system	Windows 11 64-bit Windows 10 32-bit and 64-bit Windows 7 32-bit and 64-bit	
Hardware	Processor: 1 GHz or more (2 GHz or more recommended)	

	Memory: 2 GB or more (4 GB or more recommended) Hard disk space: 1.0 GB or more Display: 1280 x 1024 or better
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Note 1. It is recommended to conduct zeroing after startup, significant temperature change or a long time since the last zeroing. External zeroing shall be performed in Average Only mode, and it shall be ensured that the output of the DUT is turned off;

Note 2. It is effective when the frequency is greater than or equal to 500 MHz and the video bandwidth is turned off.

Note 3. It is effective when the power range is -15 dBm ~ +20 dBm, the frequency is greater than or equal to 500 MHz, and the SWR of the DUT is less than 1.20. In the free operation mode, the average is set to 32.

Option information

Option information of the USP peak/average power Sensor

No.	Option No.	Option name	Function
1	S87230-H01	USB cable	Length: 2.0m
2	S87230-H02	USB cable	Length: 4.5m
3	S87230-H03	Trigger cable	Length: 1.5m
4	S87230-H04	Trigger cable	Length: 4.5m
5	S87230-H05	Safety instrument transport case	High-strength portable packing box with handle is used for transport purpose and can accommodate one Sensor set
6	S87230-H06	Safety instrument transport case	High-strength portable packing box with handle is used for transport purpose and can accommodate two Sensor sets
7	S87236D-H12	English options	English label, manual, power measurement and display software, etc.
8	S87236E-H12	English options	English label, manual, power

			measurement and display software, etc.
9	S87236F-H12	English options	English label, manual, power measurement and display software, etc.
10	S87236L-H12	English options	English label, manual, power measurement and display software, etc.
11	S87236D-JL	Measurement service	Measurement and calibration services and measurement reports are provided
12	S87236E-JL	Measurement service	Measurement and calibration services and measurement reports are provided
13	S87236F-JL	Measurement service	Measurement and calibration services and measurement reports are provided
14	S87236L-JL	Measurement service	Measurement and calibration services and measurement reports are provided
15	S87236D-EWT1	An extended warranty of one year beyond the standard warranty period is provided.	Extended warranty options are available for purchase after the standard warranty expires: one year, two years, and so forth. The service does not include calibration and covers only one-way shipping costs.
16	S87236E-EWT1	An extended warranty of one year beyond the standard warranty period is provided.	Extended warranty options are available for purchase after the standard warranty expires: one year, two years, and so forth. The service does not include calibration and covers only one-way shipping costs.
17	S87236F-EWT1	An extended warranty of one year beyond the standard warranty period	Extended warranty options are available for purchase after the standard warranty expires: one

		is provided.	year, two years, and so forth. The service does not include calibration and covers only one-way shipping costs.
18	S87236L-EWT1	An extended warranty of one year beyond the standard warranty period is provided.	Extended warranty options are available for purchase after the standard warranty expires: one year, two years, and so forth. The service does not include calibration and covers only one-way shipping costs.