

FA-VA5 Datasheet

Table 1: Technical data		
Frequency range	0.01 MHz ... 600 MHz, (resolution: 1 Hz)	
Measuring range limits	$s \leq 100$, $Z \leq 1000 \Omega$ *	
Measurement result	full impedance value (resistance and reactance), including sign	
Accuracy	$\leq 2\%$ ($0.01\text{MHz} \leq f \leq 200 \text{ MHz}$, $Z < 1000 \Omega$)	
Dynamic range of the mode	Precise: 80 dB to 200 MHz, 50 dB 200 MHz ... 600 MHz	
Return Loss Mode Standard:	75 dB to 200 MHz, 45 dB 200 MHz ... 500 MHz	
Fast mode:	70 dB to 200 MHz, 40 dB 200 MHz ... 500 MHz	
Frequency stability	0.5 ppm (-30 ° C ... + 85 ° C)	
Signal processing	24-bit ADC, 16-bit DSP, 32-bit calculation	
Power supply	2 × 1.5V AA battery	
Measuring input	50 Ω , BNC	
Output signal	Squarewave	
	f = 1 MHz, RL = 50 Ω :	P1 = 5.6 dBm (1 st harmonic, fundamental)
		P3 = -4.0 dBm (3rd harmonic)
		P5 = -8.3 dBm (5th harmonic)
	f = 200 MHz, RL = 50 Ω :	P1 = 4.5 dBm (1st harmonic, fundamental)
		P3 = -7.2 dBm (3rd harmonic)
P5 = -15.3 dBm (5th harmonic)		
Current consumption	38 mA ** (65 mA) at 1 MHz, 47 mA ** (85 mA) at 200 MHz, Load resistance 50 Ω , lighting switched off, single frequency measurement Z	
Current real time clock	0.9 uA	
Dimensions	127 mm × 86 mm × 23 mm (L × W × H)	
Mass	280 g incl. AA batteries	
* Measurements beyond that, but possible with less accuracy		
** Mean, peak in parentheses		