

Parallelism				
	(0 ÷ 500) mm		0,012 μm	
ELECTRICAL QUANTITIES				
DC Voltage				
	100 μV ÷ 1000 V		(0,0002 ÷ 0,00039) %	
DC Current				
	(0 ÷ 200) mA		(0,0003 ÷ 0,0005) %	<i>clamp meters</i>
	(0,2 ÷ 20) A		(0,0020 ÷ 0,040) %	
	(20 ÷ 100) A		0,01 %	
	(100 ÷ 1000) A		0,65 %	
AC Voltage				
	0,22 mV ÷ 22 V	10 Hz ÷ 1 MHz	(0,017 ÷ 0,12) %	
	(22 ÷ 220) V	10 Hz ÷ 500 kHz	(0,0031 ÷ 0,050) %	
	(220 ÷ 1000) V	10 Hz ÷ 100 kHz	(0,013 ÷ 0,050) %	
	220 μV ÷ 3,5 V	500 kHz ÷ 30 MHz	(0,8 ÷ 11) %	
AC Current				
	20 μA ÷ 2 A	10 Hz ÷ 100 kHz	(0,0050 ÷ 0,023) %	<i>clamp meters</i>
	(2 ÷ 20) A	10 Hz ÷ 50 kHz	(0,026 ÷ 0,064) %	
	(20 ÷ 120) A	45 Hz ÷ 440 Hz	1,5 %	
	(120 ÷ 1000) A	45 Hz ÷ 65 Hz	0,25 %	
DC Resistance				
	0,001 Ω ÷ 1 TΩ		(0,0007 ÷ 0,24) %	
AC Resistance				
	1 Ω ÷ 1 MΩ	1 kHz	(0,024 ÷ 0,05) %	
	1 Ω	50 kHz	0,059 %	
	100 Ω	20 Hz ÷ 1 MHz	0,028 %	
	1 kΩ	20 Hz ÷ 1 MHz	0,028 %	
Capacitance				
	1 pF ÷ 1 mF	1 kHz	(0,015 ÷ 0,51) %	
	(1 ÷ 10) mF	1 kHz	1,2 %	
Inductance				
	1 μH ÷ 10 H	1 kHz	(0,02 ÷ 5,3) %	
AM modulation – depth index				
	(0 ÷ 99) %	<i>fn: 50 kHz ÷ 50 GHz</i> <i>Fmod: 0,5 Hz ÷ 1 MHz</i>	(0,3 ÷ 0,8) % _{AM}	<i>fn – carrier</i> <i>Fmod – modulation frequency</i>
FM modulation – deviation				
	(0 ÷ 2) MHz	<i>fn: 50 kHz ÷ 50 GHz</i> <i>Fmod: 0,5 Hz ÷ 1 MHz</i>	(0,32 ÷ 0,5) %	
PM modulation – deviation				
	(0 ÷ 50) rad	<i>fn: 50 kHz ÷ 50 GHz</i>	(2 ÷ 5) %	

Measurement domain quantity/parameter	Measuring range Additional parameter ¹	Measurement uncertainty CMC ²	Remarks ³
	<i>F_{mod}: 0,5 Hz ÷ 1 MHz</i>		
Total harmonics distortion (THD)			
	(0,01 ÷ 100) % (0,01 ÷ 100) kHz	0,2 %	
RF and microwave power			
	10 µW ÷ 25mW 10 MHz ÷ 18 GHz	0,74 %	N connector
	10 MHz ÷ 26,5 GHz	1,2 %	SMA connector
	10 µW ÷ 120 W 25 MHz ÷ 1 GHz	1,7 %	N connector
	(0 ÷ 120) W (0,2 ÷ 4) GHz	3,2 %	N connector
Attenuation			
	0 dB ÷ 50 dB 10 MHz ÷ 18 GHz	0,029 dB	N connector
	10 MHz ÷ 26,5 GHz	0,03 dB	SMA connector
	50 dB ÷ 130 dB 10 MHz ÷ 18 GHz	0,17 dB	N connector
	10 MHz ÷ 26,5 GHz	0,18 dB	SMA connector
	(0 ÷ 70) dB (6,85 ÷ 25,86) GHz	0,26 dB	waveguide
RF power – calibration coefficient			
	1 mW 100 kHz ÷ 18 MHz	0,8 %	N connector
	10 MHz ÷ 26,5 GHz	(1,2 ÷ 2,4) %	SMA connector
Reflection coefficient Γ (S matrix)			
	0 ÷ 1 10 MHz ÷ 18 GHz	0,002	N connector
	10 MHz ÷ 26,5 GHz	0,007	SMA connector
Phase of reflection coefficient Γ (S matrix)			
	(0 ÷ 360)° 10 MHz ÷ 18 GHz $0 \leq \Gamma \leq 1$	(0,9 ÷ 2,8)°	N connector
	10 MHz ÷ 26,5 GHz $0 \leq \Gamma \leq 1$	(0,75 ÷ 2,3)°	SMA connector
TIME AND FREQUENCY			
Frequency			
	5 MHz, 10 MHz 0,01 Hz ÷ 1 MHz 1 MHz ÷ 12,4 GHz (12,4 ÷ 26,5) GHz	$2,4 \cdot 10^{-11} \%$ $2 \cdot (2 \cdot 10^{-12} + \text{RMS}) \cdot f_p$ $7,32 \cdot 10^{-12} \cdot f_p$ $4,5 \text{ Hz} + 1,42 \cdot 10^{-13} \cdot f_p$	<i>f_p</i> – measurement frequency <i>RMS</i> ∈ (2,8 · 10 ⁻¹⁰ ÷ 3,7 · 10 ⁻¹⁰)
Phase			
	(0 ÷ 360)° (0,1 ÷ 100) V 1 Hz ÷ 100 kHz	(0,06 ÷ 0,41)°	
FLOW			
Air flow			
	0,01 ÷ 1000 lpm	0,8 %	<i>lpm</i> – litres per minute

Measurement domain quantity/parameter	Measuring range <i>Additional parameter</i> ¹	Measurement uncertainty CMC ²	Remarks ³
Liquid flow			
	0,025 ÷ 1500 gpm	0,45 %	<i>gpm – gallons per minute</i>
FORCE AND TORQUE			
Force			
	(200 ÷ 2000) lbf (2200 ÷ 22000) lbf (6000 ÷ 60000) lbf (10 ÷ 110) kg (1 ÷ 11) kg (10 ÷ 1210) g	0,77 lbf 5,8 lbf 18 lbf 6 g 0,6 g 0,3 g	<i>lbf – pound-force - = 4,448222 N</i>
Torque			
	(1 ÷ 3000) Nm	(0,11 ÷ 0,21) %	
MASS			
Mass			
	(0 ÷ 1200) g (1200 ÷ 20000) g 1 mg ÷ 10 kg	2 mg 100 mg (0,002 ÷ 5,3) mg	
OPTICAL QUANTITIES			
Power of optical radiation			
	(0,0 ÷ 60,0) dB (0,0 ÷ 30,0) dB (-70 ÷ 5) dB	0,03 dB 0,03 dB 0,14 dB	<i>SM</i> <i>MM</i> <i>Relative power</i>
Optical length (optical fiber)			
	(0,001 ÷ 30) km	1,7 m 0,5 m	<i>850 nm</i> <i>1300 nm</i>
	(0,001 ÷ 32) km	0,7 m	<i>SM</i>
Unit attenuation (optical fiber)			
	(0,001 ÷ 5) km (0,001 ÷ 20) km	0,070 dB/km (0,011 ÷ 0,027) dB/km	<i>850 nm</i> <i>1300 nm, 1310 nm, 1550 nm</i>
Power of laser radiation			
	(0,1 ÷ 200) mW	0,06 % 0,1 %	<i>1,06 μm</i> <i>1,54 μm</i>
Energy of lase radiation			
	(0,1 ÷ 300) mJ	0,16 % 0,03 %	<i>1,06 μm</i> <i>0,53 μm</i>
Photometry			
	(5·10 ⁻⁶ ÷ 1,5·10 ⁻³) fL	3,5 %	<i>fL – foot-lambert = 3.4262591 cd/m²</i>

Measurement domain quantity/parameter	Measuring range <i>Additional parameter</i> ¹	Measurement uncertainty CMC ²	Remarks ³
PRESSURE			
Relative pressure			
	(-1 ÷ 0) bar	0,018 %	gas
	(1,4 ÷ 7000) kPa	(0,0012 ÷ 0,0027) %	gas
	(7 ÷ 70) MPa	0,26 %	gas
	(0,5 ÷ 225) MPa	0,26 %	oil
Absolute pressure			
	(1,4 ÷ 7000) kPa	(0,0025 ÷ 0,0040) %	gas
	(7 ÷ 70) MPa	0,41 %	gas
	(0,5 ÷ 225) MPa	0,41 %	oil
IONIZING RADIATION AND RADIOACTIVITY			
Power of kerm in th air			
	($2 \cdot 10^{-7} \div 12,10 \cdot 10^{-2}$) Gy·s ⁻¹ (¹³⁷ Cs)	2,0 %	
	($5 \cdot 10^{-9} \div 10$) Gy·s ⁻¹ (¹³⁷ Cs)	2,8 %	
Power of absorb-dose in the air			
	($0,244 \cdot 10^{-9} \div 33,78 \cdot 10^{-6}$) Gy·s ⁻¹ (¹³⁷ Cs)	3,3 %	
	($19,24 \cdot 10^{-9} \div 1,629 \cdot 10^{-3}$) Gy·s ⁻¹ (¹³⁷ Cs)	3 %	
Power of exposure dose			
	($27,86 \cdot 10^{-9} \div 3,883 \cdot 10^{-3}$) R·s ⁻¹ (¹³⁷ Cs)	4,9 %	
	($2,21 \cdot 10^{-6} \div 1,872 \cdot 10^{-1}$) R·s ⁻¹ (¹³⁷ Cs)	4,9 %	
Power of space equivalent dose			
	($0,292 \cdot 10^{-9} \div 40,54 \cdot 10^{-6}$) Sv·s ⁻¹ (¹³⁷ Cs)	4,9 %	
	($23,09 \cdot 10^{-9} \div 1,955 \cdot 10^{-3}$) Sv·s ⁻¹ (¹³⁷ Cs)	4,9 %	
Power of individual equivalent dose			
	($0,295 \cdot 10^{-9} \div 40,88 \cdot 10^{-6}$) Sv·s ⁻¹ (¹³⁷ Cs)	4,9 %	
	($23,28 \cdot 10^{-9} \div 1,971 \cdot 10^{-3}$) Sv·s ⁻¹ (¹³⁷ Cs)	4,9 %	
	$3 \cdot 10^{-3}$ Sv·h ⁻¹ (¹³⁷ Cs)	5,8 %	
	($1 \cdot 10^{-6} \div 10$) Sv·h ⁻¹ (¹³⁷ Cs)	5,5 %	
	($1 \cdot 10^{-6} \div 10$) Sv·h ⁻¹ (¹³⁷ Cs)	5,6 %	
Kerm in the air			
	($2 \cdot 10^{-6} \div 20 \cdot 10^{-3}$) Gy (¹³⁷ Cs)	2,0 %	
	($50 \cdot 10^{-9} \div 1,1$) Gy (¹³⁷ Cs)	2,8 %	
Absorb dose in the air			
	($14,64 \cdot 10^{-6} \div 2,91$) Gy (¹³⁷ Cs)	3,3 %	
	($11,54 \cdot 10^{-6} \div 140$) Gy (¹³⁷ Cs)	3 %	
Exposure dose			
	($16,71 \cdot 10^{-6} \div 335$) R (¹³⁷ Cs)	4,9 %	

Measurement domain quantity/parameter	Measuring range Additional parameter ¹	Measurement uncertainty CMC ²	Remarks ³
	(1,32·10 ⁻³ ÷ 16179) R (¹³⁷ Cs)	4,9 %	
Space equivalent dose			
	(17,57·10 ⁻⁶ ÷ 3,5) Sv (¹³⁷ Cs)	5 %	
	(13,85·10 ⁻⁶ ÷ 168) Sv (¹³⁷ Cs)	5 %	
Individual equivalent dose			
	(17,71·10 ⁻⁶ ÷ 3,53) Sv (¹³⁷ Cs)	5 %	
	(13,97·10 ⁻⁶ ÷ 170) Sv (¹³⁷ Cs)	5 %	
	(1·10 ⁻⁶ ÷ 10) Sv (¹³⁷ Cs)	5,5 %	
	(1·10 ⁻⁶ ÷ 10) Sv (¹³⁷ Cs)	5,6 %	
Intensity of surface radiation			
	20,82 s ⁻¹ ·cm ⁻² (⁹⁰ Sr)	4 %	
	25,60 s ⁻¹ ·cm ⁻² (⁹⁰ Sr)	4 %	
	13,93 s ⁻¹ ·cm ⁻² (³⁶ Cl)	4 %	
	9,33 s ⁻¹ ·cm ⁻² (¹⁴ C)	4 %	
	8,24 s ⁻¹ ·cm ⁻² (²⁴¹ Am)	6 %	
	1,76 s ⁻¹ ·cm ⁻² (²⁴¹ Am)	6 %	
Radiation activity			
	5,690 kBq (²⁴¹ Am)	3,8 %	
	11,038 kBq (¹⁰⁹ Cd)	3,8 %	
	0,339 kBq (⁵⁷ Co)	3,8 %	
	0,342 kBq (¹¹³ Sn)	3,8 %	
	3,777 kBq (¹³⁷ Cs)	3,8 %	
	2,452 kBq (⁵⁴ Mn)	3,8 %	
	6,774 kBq (⁶⁰ Co)	3,8 %	
TEMPERATURE AND HUMIDITY			
Temperature			
	(-80 ÷ 660) °C	(0,02 ÷ 0,12) °C	
	(-15 ÷ 1100) °C	(0,1 ÷ 1,1) °C	<i>infrared</i>
HUMIDITY			
	(-7,47 ÷ 24,16) °C DP	(0,08 ÷ 0,13) °C DP	
	(10 ÷ 95) % RH	(0,08 ÷ 0,69) % RH	

¹ Additional parameter, for example frequency.

² Measurement uncertainty CMC (Calibration and Measurement Capability) – the least (valid in the measuring range) measurement uncertainty, which calibration laboratory can achieve to perform more or less routine calibration of “the best existing measuring device”. Measurement uncertainty CMC should be expressed as the expanded measurement uncertainty at the coverage probability of approximately 95%.

³ Column for placing additional information.