



EKRAN
OPTICAL SYSTEMS



PMT



Photomultiplier tube PMT 200

Low-noise photomultiplier tube PMT 200 has a translucent antimony-potassium-cesium photocathode with spectral characteristics in the area of 300 is 650 nm, the electrostatic focusing of electrons, 12-dynode multiplied system louvered type, flat face optical input and reflex output; made without socle design with tough wires. The photomultiplier is used for reception of weak light fluxes in the area, starting with a single photoelectron, the equipment used for fundamental and applied research in the physics of cosmic rays and astrophysics.

Technical specification

Parameter, unit	Standard		
	No less	Nominal	No more
Constructive dimensions			
Diameter (max), mm	170		
Useful photocathode diameter, mm	150		
Fit length, mm	190 ₋₆		
Weight, g	1000		
Electrical and lighting parameters			
Spectral sensitivity of photocathode at the wavelength 410 nm, A/Wt	4,6x10 ⁻²	-	-
Luminous anode sensitivity, A/lm	-	100	-
Supply voltage, V	-	-	1850
Dark current, A	-	-	3x10 ⁻⁷
Count rate of dark impulse (at single – electron luminescence impulses regime of registration) kHz	-	-	25
Maximum position of spectral characteristics, nm	410	-	430
Energetic resolution, %	-	-	10
Width at half-height time distribution of signal-electron pulses, ns	-	-	25
After - impulses (from 100 ns to 1,6 maximum after the main pulse), %	-	-	10
Resistance to external factors			
Sinusoidal vibration (vibration strength): - frequency range, Hz - acceleration amplitude, m/s ² (g)	1÷200 50 (5)		
Mechanical shock of repeated action with peak shock acceleration, m/s ² (g)	150 (15)		
Operating temperature of ambient, °C	minus 60; +70		
High pressure air, kPa (kgf/cm ²)	147 (1,5)		
Low working pressure, kPa (mm Hg)	53,3 (400)		
MTF, h	3000		



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