

Second generation photodetectors and photodetector devices: measurement methods

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This article is devoted to solving the problem of ensuring the traceability and repeatability of second-generation photodetectors' parameters measurements. There are presented an improved block diagram of measuring methods, the division into groups of second-generation FPU measurement methods and control of auxiliary equipment.

Keywords: photodetector, photodetector devices, measurement methods, metrological support, errors, equipment control.

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REFERENCES

1. GOST 17772-88. Semiconducting photoelectric detectors and receiving photoelectric devices. Methods of measuring photoelectric parameters and determining characteristics. - M.: USSR State Committee for Standards, 1988. - 65 p.
2. CI Systems [Website]. URL: <https://www.ci-systems.com/Home/> (date of the application: 18.03.2019).
3. HGH Infrared [Website]. URL: <https://hgh-infrared.com/> (date of the application: 18.03.2019).
4. Inframet [Website]. URL: <https://www.inframet.com/> (date of the application: 18.03.2019).
5. National Institute of Standards and Technology [Website]. URL: <https://www.nist.gov> (date of the application: 18.03.2019).