



**Program for state defense and security:** Development of modern, breakthrough technologies for state security and defense under the codename "SZAFIR".

**Project:** Optical technologies of quantum cryptology for data protection in ICT networks.



Attachment No. 1 to the Request for Quotation No. 02/2024/OPTOKRYPT

## Contract Subject Description



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## Phase Modulator

### 1.1. Specification

- Operating wavelength:
  - no less than: 1530nm,
  - no more than: 1625nm;
- Usable electro-optical bandwidth: at least 16GHz;
- $V_{\pi}$  RF @50kHz: no more than 4V;
- Insertion loss: no more than 2,5dB;
- Bias voltage:
  - min: -15V,
  - max: +15V;
- Optical fiber type: Single Mode and Polarization Maintaining fiber;
- Connectors:
  - K-RF connector (*SMA compatible*),
  - FA: FC/APC optical connectors, slow axis parallel to the key;
- Operating temp.:
  - no less than 0°C,
  - no more than +70°C;
- Storage temp.:
  - no less than -40°C,
  - no more than +85°C.

### 1.2. Other information

Quantity: 2 pcs.