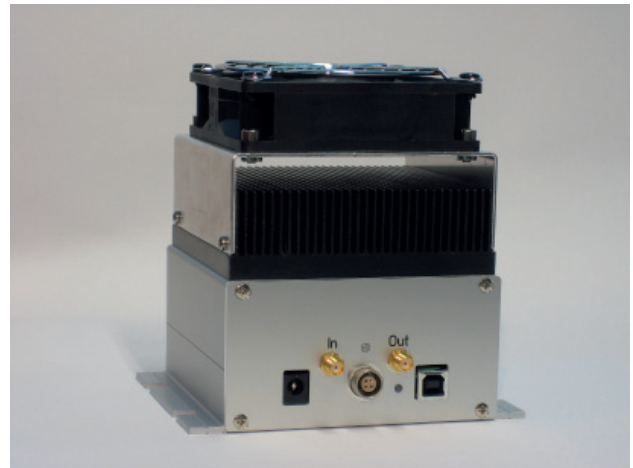


Qdetect 1500

Free running Single Photon Detector

GENERAL DESCRIPTION

The Qdetect 1500 is AIT's top-notch single photon detector for the near infrared telecom wavelength spectrum from 900 to 1700nm. The quantum efficiency can be continuously adjusted between 1% and 15% with a timing jitter smaller 300ps at maximum efficiency. Typical achievable detection rates are greater than 10MHz with a typical dark count rate of about 1kHz. The Qdetect is provided with a control panel software which allows for convenient configuration of system parameters and concurrent monitoring of up to eight attached Qdetect 1500 SPDs. This product will be licensed to the company Laser Components GmbH in 2012.



FEATURES:

- ▶ Telecom wavelength spectrum 900~1700nm
- ▶ Asynchronous free running mode
- ▶ Achievable detection rates > 10MHz
- ▶ Continuously adjustable quantum efficiency from 1% ~15%

INTERFACES:

- ▶ FC/PC optical connector / single mode optical ITU-T G.652 fiber
- ▶ Signal output: 1 x SMA, compatible with TTL, LVTTTL, PECL, NIM (optional)
- ▶ Management interface: USB 2.0

SOFTWARE:

- ▶ Graphical display and management software (Windows XP, Windows 7)
- ▶ Device driver software (Windows XP, Windows 7)
- ▶ Demonstration software

OTHERS:

- ▶ Power consumption max 70W/+12V
- ▶ EMC certification IEC 61000 family
- ▶ Operating temperature +0°C to +30°C
- ▶ Operating humidity < 90% non-condensing
- ▶ Dimensions and weight: 100x100x108mm (LxWxH), 2 kg

CONTACT

AIT Austrian Institute of Technology
Safety & Security Department
2444 Seibersdorf

DI GERHARD HUMER, MSC

Optical Quantum Technology
Phone: +43(0) 50550 - 4128
Fax: +43(0) 50550 - 4190
E-mail: gerhard.humer@ait.ac.at
Web: http://www.ait.ac.at/safety_security