

Federal Department of Justice and Police FDJP Federal Office of Metrology METAS

## **Certificate of Conformity No 151-04687**

Object

**Quantum Random Number Generator** 

Quantis-USB S/N 070222A410 Quantis-PCI-1 S/N 08338A310

Quantis-PCI Express S/N 1002251A210

**Applicant** 

id Quantique SA Ch. De la Marbrerie 3 1227 Carouge/Geneva

Switzerland

Requirements

The output of the Quantis random number generator has to pass all DIEHARD Battery of Tests, confirming that the random number generator distributes numbers with sufficient nonpredictability, fair distribution and lack of bias to particular outcomes. Specifically: 10 data sets consisting of 1E8 bits per data set is considered to be random if none of the 234 p-values produced by the 15 DIEHARD Battery of Tests has a value

between 1 and 1-epsilon, where epsilon is 1e-6.

Confirmation

The tested Quantis-USB, Quantis-PCI-1 and Quantis-PCI Express have passed all DIEHARD Battery of Tests. The sequence of random bits generated cannot be predicted. The sequence of random bits generated cannot be reproduced.

Remarks

The testing procedure used is described in the annex

document "Annex\_METAS\_151-04687"



Certified true copy of an original document comprising page(s); Geneva, 10 JUIN 2014 /mib

CH-3003 Bern-Wabern, 10 May 2010 Fr. 2.

For the Test

Dr. Damian Twerenbold

Division Mechanics, Radiation and Time

Dr. Philippe Richard, Vice-Director

This document may not be published or forwarded other than in full.

Lindenweg 50, CH-3003 Bern-Wabern, Tel. +41 31 32 33 111, www.metas.ch



## **Certificate of Compliance**

This is to certify that the Random Number Generator

Quantis-v10.10.08

## **ID Quantique SA**

REF: CTL-037/37001

has been tested by

**CTL, Compliance Testing Laboratory** 

and has been found to be suitably unpredictable and fit for purpose

Issue Date: 30.03.2011

Certified true copy of an original document comprising page(s).

Technical Compliance Manager, CAST Limited







CAST LTD Compliance Testing Laboratory,

A company approved and certified under the Online Gambling Regulation Act 2001 and accredited by UKAS for UK Testing