This is a published notice on the Find a Tender service: https://www.find-tender.service.gov.uk/Notice/001637-2023

Award

Semiconductor Lifetest Equipment

National Physical Laboratory

F15: Voluntary ex ante transparency notice
Notice identifier: 2023/S 000-001637
Procurement identifier (OCID): ocds-h6vhtk-0398be
Published 19 January 2023, 10:25am

Section I: Contracting authority/entity

I.1) Name and addresses

National Physical Laboratory

Hampton Road

Teddington

TW11 0LW

Email

nina.heath@npl.co.uk

Country

United Kingdom

Region code

UK - United Kingdom

Internet address(es)

Main address

www.npl.co.uk

I.4) Type of the contracting authority

Body governed by public law

I.5) Main activity

Other activity

Research

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

Semiconductor Lifetest Equipment

II.1.2) Main CPV code

- 38000000 - Laboratory, optical and precision equipments (excl. glasses)

II.1.3) Type of contract

Supplies

II.1.4) Short description

NPL and the University of Glasgow will work together to establish a service for Burn-in and Life-testing of semiconductor laser diodes in high-volume for manufacturers and suppliers of laser diodes.

The requirements for such a system are as follows:

Essential:

• TO46, TO3, TO5, TO8, TO9 package compatibility in volumes up to 200 per month for burn-in and 100 devices for life-test per month

• Life-test duration 10,000 hours

• Burn in / Life-test temperature from Ambient to 150degC with independent heaters in each module

• Maximum bias up to 1A on TO3 and TO8 package, and Chip-on-carrier (CoC)

• Bar test – Typical bar with dimensions 30 mm long and up to 10 mm wide, with 100 devices across. All the devices on the bar will require burn-in. At least 10 devices on each bar will need life-test.

• Optical detector to monitor light output of each device under test

• Wavelength range from 400 nm – 1600 nm

• Temperature sensor at each device for close monitoring

• Independent current drive for each device

• Adaptable/re-configurable bar-test, CoC layout and # of pins on TO-packages for future “non-standard” testing requests

• Low noise, highly stable current driver for each device (1degC)

• Remote access to monitor and control system software

II.1.6) Information about lots

This contract is divided into lots: No

II.1.7) Total value of the procurement (excluding VAT)

Value excluding VAT: £350,000

II.2) Description

II.2.3) Place of performance

NUTS codes

- UK - United Kingdom

Main site or place of performance

NPL Management Ltd

Hampton Road

Teddington

TW11 0LW

II.2.4) Description of the procurement

The requirements for such a system are as follows:

Essential:

• TO46, TO3, TO5, TO8, TO9 package compatibility in volumes up to 200 per month for burn-in and 100 devices for life-test per month

• Life-test duration 10,000 hours

• Burn in / Life-test temperature from Ambient to 150degC with independent heaters in each module

• Maximum bias up to 1A on TO3 and TO8 package, and Chip-on-carrier (CoC)

• Bar test – Typical bar with dimensions 30 mm long and up to 10 mm wide, with 100 devices across. All the devices on the bar will require burn-in. At least 10 devices on each bar will need life-test.

• Optical detector to monitor light output of each device under test

• Wavelength range from 400 nm – 1600 nm

• Temperature sensor at each device for close monitoring

• Independent current drive for each device

• Adaptable/re-configurable bar-test, CoC layout and # of pins on TO-packages for future “non-standard” testing requests

• Low noise, highly stable current driver for each device (1degC)

• Remote access to monitor and control system software

II.2.5) Award criteria

Cost criterion - Name: Technical / Weighting: 70%

Cost criterion - Name: Commercial / Weighting: 30%

II.2.11) Information about options

Options: No

II.2.13) Information about European Union Funds

The procurement is related to a project and/or programme financed by European Union funds: No

Section IV. Procedure

IV.1) Description

IV.1.1) Type of procedure

Award of a contract without prior publication of a call for competition in the cases listed below

- The procurement falls outside the scope of application of the regulations

Explanation:

YELO is the only company to manufacture and to sell an industrial burn-in and lifetest system able to test at hight-volume TO-cans, chip-on-carrier and bar in one modular system, with independent current driver for each device, temperature sensors at each device, and oven temperatures up to 150degC. The exclusive design of the YELO Y1000 system allows testing of a wide range of semiconductor laser devices with designs that are still under development.

These requirements are all essential for our use due to specific customer requests. Furthermore, these requirements are aligned to what is existing operations at the Compound Semiconductor Applications Catapult (CSAC) – a partner organisation whom NPL and the University of Glasgow closely interact with on Burn-in and Reliability of laser diodes.

IV.1.8) Information about the Government Procurement Agreement (GPA)

The procurement is covered by the Government Procurement Agreement: Yes

Section V. Award of contract/concession

A contract/lot is awarded: Yes

V.2) Award of contract/concession

V.2.1) Date of conclusion of the contract

19 January 2023

V.2.2) Information about tenders

The contract has been awarded to a group of economic operators: No

V.2.3) Name and address of the contractor/concessionaire

Yelo Ltd.

Trooperslane Industrial Estate 20 Meadowbank Road

Carrickfergus

BT38 8YF

Country

United Kingdom

NUTS code

- UKN - Northern Ireland

The contractor/concessionaire is an SME

Yes

V.2.4) Information on value of contract/lot/concession (excluding VAT)

Total value of the contract/lot/concession: £350,000

V.2.5) Information about subcontracting

The contract/lot/concession is likely to be subcontracted

Section VI. Complementary information

VI.4) Procedures for review

VI.4.1) Review body

NPL Management Ltd

Hampton Road

Teddington

TW11 0LW

Country

United Kingdom

VI.4.2) Body responsible for mediation procedures

NPL Management Ltd

Hampton Road

Teddington

TW11 0LW

Country

United Kingdom