

## GOOGLE COURTESY TRANSLATION OF THE MARKET SURVEY NOTICE U-BUY N. A00086

### ANNEX B

**TECHNICAL SPECIFICATIONS FOR AWARDING THE CONTRACT RELATING TO THE *SUPPLY OF A HYPERSPECTRAL RADIOMETER FOR THE AUTOMATIC MEASUREMENT OF RADIANCE TO ZENITH IN THE CONTEXT OF THE PER-ACTRIS-IT PROJECT*, THROUGH PROCEDURE NEGOTIATED ON THE U-BUY PLATFORM. 1 PARAGRAPH 2 LETT. B) OF D.L. N. 76/2020, CONVERTED INTO L. 120/2020, AS AMENDED BY THE D.L. 77/2021 OF 05/31/2021 CONVERTED INTO LAW NO. 108 OF 07/29/2021.**

The object of the supply is the acquisition of a hyperspectral radiometer for the measurement of radiance at the zenith measured in the spectral range of visible radiation. The instrument will be installed outside at the Lampedusa Climate Observation Station and will have to operate autonomously by interfacing with a PC and / or datalogger.

The minimum technical characteristics that the instrument must meet are:

- spectral range of measurement between 350 to 800 nm
- spectral bandwidth  $\leq 10$  nm
- spectral accuracy  $\leq 0.3$  nm
- spectral dispersion  $\leq 3.3$  nm / pixel
- measurement accuracy  $< 7\%$  of the measured value
- field of view  $\leq 9^\circ$
- automatically variable integration time to optimize the measurement in a time interval at least between at least 8 ms and 8000 ms
- ambient operating temperature between  $+5$  and  $+40^\circ\text{C}$
- weight  $< 1.5$  kg
- size  $< 40$  cm x 7cm x 7cm
- consumption  $< 2$  W
- degree of protection, IP68
- DC power supply with voltage between 8 and 18 VDC

The supply must also include:

- manual for installation, maintenance and operation in Italian or English
- certificate of calibration
- power system
- interface system (hardware and software) to a PC via RS232 or USB, unless the instrument is equipped with an internal data logger that allows continuous data acquisition for 6 consecutive months with a time resolution of 15 seconds
- power and data transmission cable (s) with a length of  $> 20$  m

Furthermore, the supplier is required:



- i. the delivery of the material to the ENEA Station of Climatic Observations of Lampedusa, Località Capo Grecale, 92031 Lampedusa (AG);
- ii. a maximum time for the execution of the supply equal to 90 days from the date of the ENEA order;
- iii. two-year warranty from the date of delivery of the instrumentation;

It should also be noted that:

- in case of delay in delivery with respect to the deadline declared in the offer - except for reasons of force majeure not attributable to the Supplier, which bears the burden of proof - ENEA will have the right to apply a daily penalty for each working day of delay equal to 1 ‰ (one per thousand) of the supply value, it being understood that the total amount of penalties cannot exceed 10% (ten percent) of the net amount of the supply.

- between the provisional award and the final award / stipulation there may be a time limit that cannot be quantified a priori, as it depends on the issuance of a decree of the Ministry of University Research.

The procedure will have an assumed amount of € 9,200.00 excluding VAT (11,224.00 VAT included), to be considered as a basis for the economic discount.

Roma, 15/09/2021

Il Responsabile Unico del Procedimento