

### **ELEMEND - UBT Tender**

**Project:** Electrical Energy Markets and Engineering Education / ELEMEND 585681-EEP-1-2017-1-EL-EPPKA2-CBHE-JP Grant
Agreement Number 2017-2896/001-001

Publication date: 11.10.2018

**Closure date:** 10.11.2018

Contract type: Supply for Laboratory Equipment for ELEMEND

**Contracting authority:** UBT

**No. Reference:** 9828 - 04/10/2018

**Date:** 10.10.2018

UBT requires professional contractor to supply laboratory equipment that equipment must be within the standards set in accordance with conformity regulations. The contracting party entering into this agreement has the full responsibility for the equipment supplied in accordance with the contract terms (delivery dates, timeliness, pricing, origin of the equipment etc.). This tender due to the nature of the hardware and software, the bidding companies may apply for the following:

## **Quantity** Description

Features:

Low noise floor (-117dBm@1GHz, 3k RBW)

Sequence programming functions

ACPR, OCBW, Channel Power, N-dB and Phase Jitter Measurements

10 Markers with Delta Marker, Peak Functions

AC/DC/Battery(Option)three modes of power supply

USB/RS-232C/GPIB(Option) Interface

4" TFT Color LCD, Resolution: 640x480

### 1 Digital Transformer Analyzer METREL MI-3280

Features:

Testing turn ration r,rA,rB and rC with excitation voltage 1V, 5V, 10V, 40V and 80V,for ranges j 0.8 - 8000 and best accuracy 0,2%

Testing excitation current ii, iA, iB and iC with test frequency 55,65 or 70Hz for range 0,1mA to 1.10A with accuracy 2%

Testing phase deviation fi, jA, jB and jC with test frequency 55,65 or 70Hz for range 0,1mA to 1.10A with accuracy 0.05%

Testing winding resistance with test current 10mA to 1000mA, for range 1mOhm to 999.90hm with accuracy 2%

A 3.4" color LCD display with touch screen offers easy-to-read results and all associated parameters.

The operation is straightforward and clear to enable the user to operate the instrument without the need for special training.

Test results can be stored on the instrument. PC software that is supplied as a part of standard set enables transfer of measured results to PC where they can be analyzed or printed.

Built-in help screens for referencing on site.

Auto test sequences.

Built-in charger and rechargeable batteries as standard accessory.

BT communication with PC, Android tablets and smart phones via built-in BT.

PC SW Meter ES Manager for creation of test structures and uploading, downloading of test results, auto test editor and report creation.

High degree of protection IP 65 (case closed), IP 54 (case open)

CAT IV 50V voltage protection

Dimensions 360x160x330mm, weight 8,8kg

Consisted of:

Instrument MI 3280

4 wire test lead with Kelvin clips, 2.5 m 4 pcs

USB cable

Mains cable

Soft carrying bag

Metre I ES Manager BASIC license\*

Instruction manual

Calibration certificate

### 1 Power quality and Energy analyzer FLUKE 437-II

Features:

Energy loss calculator: classic active and reactive power measurements, unbalance and harmonic power, are quantified to pinpoint the fiscal costs of energy losses

Troubleshoot real-time: analyze the trends using the cursors and zoom tools

400Hz measurements

Measure all three phases and neutral: with included four flexible current probes with enhanced thin flex design to fit into the tightest places

Automatic Trending: every measurement is always automatically recorded, without any set-up

Logger function: configure for any test condition with memory for up to 600 parameters at user defined intervals

View graphs and generate reports: with included analysis software

Battery life: seven hours operating time per charge on Li-ion battery pack

Warranty: 3 years

Set contents: hard carrying case, four current probes (i400s), five test leads and clips, battery charger, Fluke View software, optical USB cable, color localization set, getting started manual, user's manual on CD-ROM

### 3 phase consumption analyzer with WiFi CIR-M57020

Features:

Special design for mounting on the measuring point, cable free, by simply "clicking" on the fuse

Direct connection, current measuring circuits with open current transformers

Current range of up to 63A

Connectivity WiFi (IEEE802.11)

Compatible with Power Studio SCADA software

Connection with smartphone via free WiBee APP application

Monitoring of electricity consumption in real-time, archive analysis, alarms

Built-in WEB interface

The kit contains:

Circutor WiBee M57020-phase meter

Manua

## 1 Dynamic power controller with demand management CIR-PV CDP-G (for PV systems)

Features:

Management of 3 loads

Usage of PV production excess

Possibility to manage the main solar inverters in the market and many solar inverters\* by system (see the list of compatible inverters)

Web monitoring (smart-phones, tablets or PC)

Data logger and file downloading (.csv) through any web browser

Web configuration of many parameters

Display with on-line data of PV production, user consumption and grid consumption

MODBUS/TCP communications to allow SCADA integration

List of compatible inverters:

FRONIUS: types Galvo, Symo, IG Plus (also Galvo and Symo with Datamanager 2.0)

DELTA: types SOLIVIA and RPI

**KOSTAL:** types PIKO

INGETEAM: types INGECON SUN LITE DANFOSS: types TLX, DLX, FLX GROWATT: types GROWATT 1500

SMA: Sunny Boy TL, Sunny Tripower, Sunny Mini-Central

KACO NEW ENERGY: POWADOR 1501, 5001xi, 2500xi, 5000xi, 6400xi, 8000xi, 25.000xi, 33.000xi, 2002, 6002,

TL3, TR3, all XP series and Blueplanet

SIMATIC Field PG M5 – The latest high-performance programming device in semi-ruggedized notebook design.

For mobile operations in industrial plants, the SIMATIC Field PG M5 offers both rugged hardware and preinstalled TIA Portal engineering software for fast and efficient configuring, commissioning, service and maintenance.

The SIMATIC Field PG hereby offers all interfaces required for these tasks: For connecting to the automation process, the SIMATIC Field PG is equipped both with a PROFIBUS interface and two high-speed PROFINET interfaces. SIMATIC memory cards can be programmed directly in corresponding slots.

The SIMATIC Field PG is designed to withstand shocks and vibrations and to resist electromagnetic radiation in the industrial environment close to machines.

Technical data:

The Field PG M5 is available in two different hardware versions: Comfort and Advanced.

Feature Field PG M5 Comfort Field PG M5 Advanced

Processor Intel® Core™ i5-6440EQ

(6th generation, 4 cores),

6 MB cache, up to 3.4 GHz

with turbo boost technology Intel® Core™ i7-6820EQ

(6th generation, 4 cores),

8 MB cache, up to 3.5 GHz

with turbo boost technology

Memory 8 / 16 / 32 GB DDR4-SDRAM, 2400 MHz 8 / 16 / 32 GB DDR4-SDRAM, 2400 MHz

Hard Disk Drive (SATA) 512 GB / 1 TB SSD or 1 TB HDD 512 GB / 1 TB SSD or 1 TB HDD

Graphics Intel® HD530 graphics, 4k support Intel® HD530 graphics, 4k support

Display 15, 6" wide screen, 300 cd 15, 6" wide screen, 300 cd

Resolution Full-HD (1920 x 1080 Pixel) Full-HD (1920 x 1080 Pixel))

Optical Drive Dual layer multi standard DVD - RW Dual layer multi standard DVD - RW

#### I. General terms:

# II.1 The offers shall include the following information

The full address and contact details of the bidder.

To include details of the bank account of the bidder

The number of supply offer.

To contain the date of the offer.

The validity of the bid must be at least 90 days from the day of delivery.

Each page of the bid must be stamped and signed by the authorized person of the company.

Bid shall be accompanied by the Business Registration Certificate (copy).

Bid shall be accompanied by the Certificate of Registration as a VAT payer.

Bid shall be accompanied by the Certificate of Fiscal Number (copy).

Offer must attach a copy of an identification document of the owner of the company (ID card or passport).

Bidder must have proven experience.

Along with the offer should include references issued by institutions with high reputation, confirming that the bidders have offered similar services or have performed satisfactorily works similar to those required by this document (not older than three years).

#### II. Terms and conditions of the tender:

Documents should be placed in a sealed envelope and delivered to the UBT (hand delivery or by postal service – mail address listed at the bottom of this letter), Neighborhood Calabria, at the Office of Protocol located at UBT. UBT will only accept offers in sealed envelopes and will not consider any other form of application (e-mail, phone, fax, etc.). UBT does not accept responsibility for damage, loss or rejection of the envelopes. Tender identification number (Project no. Elemend 585681-EEP-1-2017-1-EL-EPPKA2-CBHE-JP) must be written in the right corner of the envelope.

Bids shall be delivered to UBT's offices in accordance with the requirements set forth above. All bids must be submitted in Euro, without VAT. Tender should be submitted in a sealed envelope. Delivery of bids to be to be delivered by 17:00hrs, 10 Nov 2018, main UBT administrative building located in Prishtina, Lagja Kalabria. We reserve the right to change specifications, to cancel this tender, to re-invite participants assigned to submit their bid again, and to disqualify the bidder without giving any notice or reason. We reserve the right to not contact with the bidders during the bidding process. For any uncertainty regarding the tender, please direct your questions to the e-mail address: <a href="mailto:ines.bula@ubt-uni.net">ines.bula@ubt-uni.net</a> / tel: 038-541-400. Bids that do not comply with the conditions set forth in this document may be disqualified from the selection process. Selection of winners is based on the evaluation of the UBT Tender Committee.

Address: UBT – Kolegji Nderkombtare per Biznes dhe Teknologji "Lagja Kalabria" p.n. 10000 Prishtine, RKS

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