

# NANOVIP 2 - FOR 1 PH & BALANCED LOAD PROFESSIONAL POWER QUALITY ANALYSER





# **INTRODUCTION**

NIFA ELECTRONICS Began outlining sound company framework, built on professional lines way back in 1991. NIFA ELECTRONICS has grown by leaps and bounds in exponential manner to become one of the major player in the field of POWER CONDITIONING, POWER MANAGEMENT & Allied Technical Services..

## **BRIEF ABOUT NANOVIP 2**

**NanoVIP2** is the new handheld 1 Ph Power Quality Energy Analyzer.. This equipment is able to combine a high level of performance with an extremely competitive price.

What makes it unique is its small size, however, the instrument has all the features normally found so far only in high-end products.

NanoVIP2 is therefore a measuring instrument for anyone who requires a product easy to handle, precise and easy to use. Is therefore aimed to users who want to acquire a thorough knowledge of thir plants, both Energy Managers, Fitters, Electricians, Contractor, for the activities of diagnosis and intervention, or who want to offer a consulting service concerning all matters related to the electricity.

# **NANOVIP2 MAKES IT POSSIBLE TO**

- Control loads, consumption and costs;
- Test the correct dimensioning of new plants;
- Prevent risk to overheating and lack of insulation due to high harmonic content;
- · Correctly resolve the problems of power factor correction;
- Identify and eliminate peak load of power to also reduce the electricity consumption;
- Monitor power and consumption in different time zones
- $\bullet \quad \text{Monitor and evaluate the performance of UPS, with measures AC input and DC output (or vice versa);}\\$
- Measure signals including non-symmetrical PWM control of inverter;
- Identify the causes of issues resulting from a poor quality electrical (presence of harmonics, interruptions, overloads, voltage dips, phase unbalance voltage) which, in addition to causing potential production blocks, may damage or shorten the life cycle of of plant and machinery.

### MAIN FEATURES OF NANOVIP2 ARE **FUNCTIONS**

- · Ability to connect and analyze various types of **Electrical Systems** 
  - · Single Phase
  - · Balanced Three-phase with or without neutral
- Full traditional energy analysis (V, I, P, Q, S, F, PF,
  - THD%, actual values / minimum / maximum / average, energy meters and consumption generated for each phase and single phase).
- · Analysis of power quality parameters
  - · Harmonics of current and voltage for each phase and for the neutral,
  - Net interruption, overvoltage, sags,
  - Test according to EN 50160.

### · Advanced features

- · Real measurement of the neutral current,
- · Display waveforms of currents and voltages,
- · Configuration and display of alarms and thresholds on selectable measurement,
- Visualization of the time course of selectable parameters (trend).
- · Checking of the correct connection of the instrument to the system,
- · Possibility to measure long-term campaigns
- · Choice of language,
- · Customizable display, choosing which parameters to view according to a rotation in the lower part and turning it 90 ° in relation to the convenience of reading.

## LOOK AT ITS PLUS POINT

- · Equipped with a large graphic LCD with high efficiency, which allows the visualization of waveforms, graphics, etc., and the use of a multilingual menu (English, Italian, Spanish, German, French). The white pixels on indigo provide exceptional visibility of the display.
- An elegant keyboard with 10-key dual function allows the user an easy and intuitive navigation menu.
- The instrument can be indifferently grasped through its ergonomic rubber, or else placed on a plane thanks to an integrated removable support, both to simplify the measurement operations on the field, that the use near to a PC.
- The availability of a microSD memory card for storing data and a USB port for communication with a PC, allows the creation of accurate measurement campaigns and the subsequent analysis of the data using the dedicated software supplied.
- · A further innovation is the equipment of mini flexible current probes. This feature significantly improves the portability and handling of the instrument, reducing weight and size, without impairing the possibility of measurement.

| ELECTRICAL  |           |                              |
|---|-----------|------------------------------|
| Singlephase   |           | YES                          |
| Threephase  |           |                              |
| Input Voltage   |           | 1                            |
| Input Current   |           | 1                            |
| Safety  |           | 1600V CAT III                |
| Power Supply  |           |                              |
| Battery Packag  |           | 4 x AA 2100mAh               |
| Power supplier/   |           |                              |
| battery charger. ext.   |           | 100-240Vac / 50-60Hz         |
| User Interface  |           |                              |
| LCD   | Туре      | Graphic LCD                  |
|   | Dimention | 68x68mm.                     |
| MISURE  |           |                              |
| (V. I. P. O. S. F. PF. THD. cos   |           | VEO                          |
| Traditional energy analisys<br>(V, I, P, Q, S, F, PF, THD, cos,<br>peak, minimum , max, medium,<br>max. demand, ecc.) |           | YES                          |
| max. demand, ecc.)  |           |                              |
| Counter for each phase  |           | YES                          |
| Cogeneration  |           | YES                          |
| Waveform  |           | YES                          |
| Harmonics   |           | Up to 50°                    |
| Histogramm Harmonics  |           | YES                          |
| Dips<br>Swells  |           | > 500ms                      |
|   |           | > 500ms<br>> 500ms           |
| Interruptions   |           |                              |
| Fast Transient  |           | YES                          |
| Trend   |           | YES                          |
| Test EN 50160   |           | YES                          |
| Inrush current  |           | YES                          |
| DC Measure  |           | YES                          |
| Allarms<br>Voltage  |           | YES<br>1000Vac               |
| vuitage   |           | phase-neutral 1000Vdc        |
| Current   |           | Up to 3000A ( with miniflex) |
| Frequency   |           | 45÷65 Hz                     |
|   |           | YES                          |
| Tariffs band<br>Energy costs  |           | YES                          |
| Precision Precision   | voltage   | ±0.25% +0.05 F.S.            |
|   | Current   | ±0.25% +0.05 F.S. ± ≤ pinza  |
|   | Power     | ±0.5% +0.05 F.S. ± ≥ pinza   |
| Measurement ca  |           | YES                          |
| Alarmi Log  |           | YES                          |
| COMMUNICAT  | ION       | 160                          |
| USB   |           | To PC                        |
| Data recording  |           |                              |
| Internal memory   |           | 64kB                         |
| External memory   |           | Micro SD                     |
| Kit compositio  |           |                              |
| Mini flexible clamp   |           | 1                            |
| Voltage cable   |           | 2                            |
| Crocodiles  |           | 2                            |
| Voltmetric tip  |           | 1                            |
| Cable /miniUSB-B  |           | YES                          |
| External power supply   |           | YES                          |
| CD software   |           | YES                          |
| MicroSD card  |           | 4GB                          |
| Soft bag  |           | YES                          |

# SIMILAR PRODUCT RANGE

- JUPITER PLUS with all features of JUPITER and Web based communication software & Flicker Analysis
- JUPITER Professional Power Quality Analyser for Transients, Dips, Swells & Microinterruptions
- ENERGY EXPLORER- Professional Power & Harmonics Analyser with RMS meter, Scope function, Phase vector display & Inrush current capture
- MICRO VIP 3 PLUS for 3 phase unbalanced load with 189 instruments in one.
- NANO VIP PLUS Hand Held Power and Harmonic Analyser for balance

# **PRODUCT RANGE**

- Online UPS
- . HT & LT Industrial AVR
- Servo Stabiliser
- . Ultra Isolation Transformer
- . Automatic Power Factor Control Panel
- . Maximum Demand Control Panel
- Special Control Panels

# **SERVICES**

- Power Quality Management
- Energy Audit Study

# **CUSTOMER SUPPORT**

Centrally located in Ahmedabad, the customer support division remains consistent in progressively adding to its well-deserved reputation, spurred by a scientific spirit, entire team of engineers & technicians involved in the maintenance operations, meticulously work to keep customer demands satisfied. Our commitment to the customer goes beyond executing the best possible equipment. To help assure the perfect match of product & application, we offer and extensive direct support at all levels.

<sup>\*</sup>We reserve the rights to change product specification without prior notice.



# NIFA Electronics Pvt. Ltd.

64, Shankheshwar Indl Park; 20\2, Ph-1, GIDC, Vatva; Nr.Railway Bridge, Ahmedabad-382 445, Gujarat, India

Tel: +91-79-29707399; 29707499; +91949297988 (Fax on demand) Email: sales@nifaelectronics.com Website: www.nifaelectronics.com

