



# Nurag 40KL

## Specifications

|                                      |                                                                                        |
|--------------------------------------|----------------------------------------------------------------------------------------|
| <b>Capacity</b>                      | 40k VA / 40k W                                                                         |
| <b>Type</b>                          | On-line                                                                                |
| <b>Input</b>                         |                                                                                        |
| Nominal Voltage                      | 3 x 400 VAC (3Ph+N)                                                                    |
| Voltage range                        | 190-520 VAC (3-phase) @ 50% load<br>305-478 VAC (3-phase) @ 100% load                  |
| Frequency Range                      | 46 ~ 54Hz                                                                              |
| Phase                                | 3 Phases IN / 3 PhaseOUT                                                               |
| Power Factor                         | ≥ 0.99 at 100% load                                                                    |
| Outlet type                          | Terminal Block Wiring                                                                  |
| <b>Output</b>                        |                                                                                        |
| Nominal Voltage                      | 3 x 360*/380/400/415 VAC (3Ph+N)                                                       |
| AC Voltage Regulation (Batt. Mode)   | ± 1%                                                                                   |
| Frequency Range (Synchronized Range) | 46 ~ 54Hz                                                                              |
| Frequency Range (Batt. Mode)         | 50Hz ± 0.1 Hz                                                                          |
| Current Crest Ratio                  | 3:1 (max.)                                                                             |
| Harmonic Distortion                  | ≤ 2 % THD (Linear Load)<br>≤ 5 % THD (Non-linear Load)                                 |
| Waveform (Batt. Mode)                | Pure Sine-wave                                                                         |
| Outlet type                          | Terminal Block Wiring                                                                  |
| <b>Transfer Time</b>                 |                                                                                        |
| AC Mode to Batt. Mode                | Zero                                                                                   |
| Inverter to Bypass                   | Zero                                                                                   |
| <b>Overload</b>                      |                                                                                        |
| AC Mode                              | 100-110% for 60 min<br>110-125% for 10 min<br>125%~150% for 1 min<br>>150% immediately |
| Battery Mode                         | 100-110% for 60 min<br>110-125% for 10 min<br>125%~150% for 1 min<br>>150% immediately |



3 Phases IN /  
3 PhasesOUT



True double  
conversion



Parralel operation  
up to 3 units

- On-line with double conversion
- Smart battery charger to optimize batteries' performance
- Adjustable batteries design
- Output power factor 1.0
- Optional isolation transformer\*\*
- DSP technology guarantees high performance
- Active power factor correction in all phases
- High Efficiency on AC mode up to 95.5%
- EPO function
- Maintenance bypass
- 4.3" large touch LCD display
- Power management over SNMP / Modbus / AS 400 card
- ECO mode operation for energy saving
- Dual Input for generators compatibility

\*When output voltage is set as 3 x 360VAC, the output power of the unit will be de-rated to 90%.

\*\*Isolation transformer will occupy the internal batteries' space.



## Efficiency

|              |                                       |
|--------------|---------------------------------------|
| AC Mode      | ≥ 95.5 % with fully charged batteries |
| Battery Mode | ≥ 94.5 % with fully charged batteries |
| ECO Mode     | ≥ 98.5 % with fully charged batteries |

## Battery

|                               |                                                         |
|-------------------------------|---------------------------------------------------------|
| Internal batteries (optional) | 32~80 pieces of 12V lead acid<br>7Ah or 9Ah             |
| External batteries            | 12V lead acid,<br>(N + N) pcs x 1~2 strings;<br>N=16~20 |

Charging Voltage +/-13.65V\*N; N=16~20

Charging Current (max) 1A-12A (adjustable)

## Environment

|                  |                                                                 |
|------------------|-----------------------------------------------------------------|
| Humidity         | < 95 % RH at 0~40°C<br>(non-condensing)                         |
| Noise level      | Less than 70dB at 1 m                                           |
| Heat dissipation | up to 6844 BTU/h (line mode)<br>up to 9181 BTU/h (battery mode) |

## Management

|                        |                                                               |
|------------------------|---------------------------------------------------------------|
| Communication ports    | RS232 / USB / EPO / SNMP /<br>Modbus / AS400 (cards optional) |
| Software compatibility | ViewPower Network Edition and<br>VMWare Shutdown Wizard       |



## Physical

|                    |                     |
|--------------------|---------------------|
| Product dimensions | 815 x 300 x 1000 mm |
| Product Net Weight | 96 kg               |



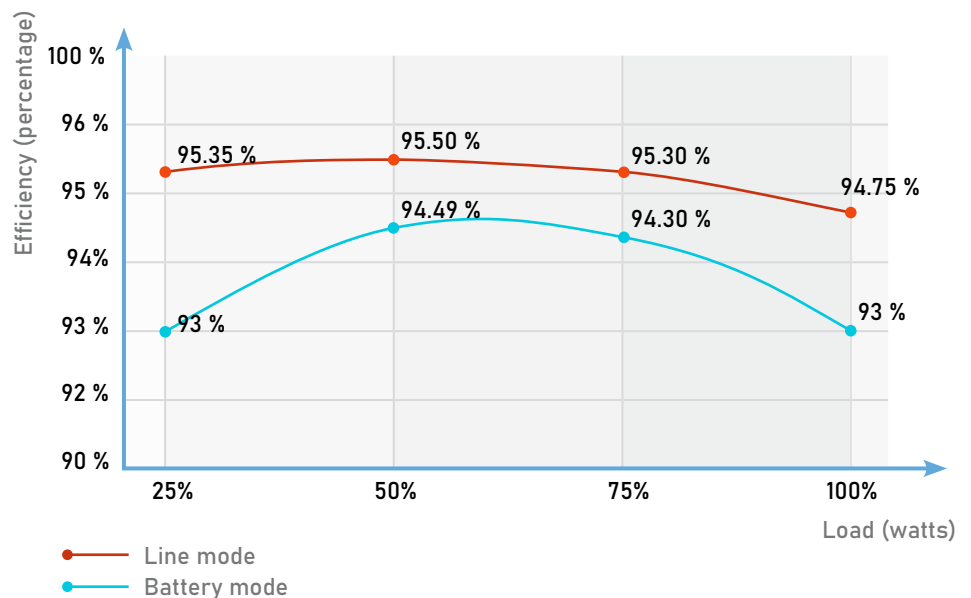
## Efficiency

### Line mode

| Load  | Efficiency |
|-------|------------|
| 100 % | 94.75 %    |
| 75 %  | 95.30 %    |
| 50 %  | 95.50 %    |
| 25 %  | 95.35 %    |

### Battery mode

| Load  | Efficiency |
|-------|------------|
| 100 % | 93.00 %    |
| 75 %  | 94.30 %    |
| 50 %  | 94.49 %    |
| 25 %  | 93.00 %    |



## Logistics

|                          |                            |
|--------------------------|----------------------------|
| Carton Box Size (LxWxH)  | 900 x 420 x 1080 mm        |
| Pieces in the Carton Box | 1                          |
| Net & Gross weight / CTN | N.W.: 96 kg / G.W.: 112 kg |



## Certificates

**RoHS** 2011/65/EU **CE**





## Ordering Information

Use combinations of **bold** letters and numbers to create part numbers for ordering.

| Range                                                                |           | VA Power                         |                                                      | Typology                              |                         |
|----------------------------------------------------------------------|-----------|----------------------------------|------------------------------------------------------|---------------------------------------|-------------------------|
| <b>AR</b>                                                            | Aria      | <b>10K</b>                       | 10K VA                                               | <b>TO</b>                             | Tower                   |
| <b>ED</b>                                                            | Edoc      | <b>20K</b>                       | 20K VA                                               | <b>BR</b>                             | Brick                   |
| <b>NE</b>                                                            | Neek      | <b>40K</b>                       | 40K VA                                               | <b>1U</b>                             | Rack (1U)               |
| <b>NK</b>                                                            | Nekot     | <b>80K</b>                       | 80K VA                                               | <b>2U</b>                             | Rack (2U)               |
| <b>NO</b>                                                            | Notner    |                                  |                                                      | <b>3U</b>                             | Rack (3U)               |
| <b>NT</b>                                                            | Neta      |                                  |                                                      | <b>C3</b>                             | Rack (3U) / Convertible |
| <b>NU</b>                                                            | Nurag     |                                  |                                                      |                                       |                         |
| <b>OH</b>                                                            | OhcePRO   |                                  |                                                      |                                       |                         |
| <b>RD</b>                                                            | Redlab    |                                  |                                                      |                                       |                         |
| <b>RS</b>                                                            | Resta     |                                  |                                                      |                                       |                         |
| <b>RT</b>                                                            | Retos     |                                  |                                                      |                                       |                         |
| <b>RG</b>                                                            | Regnar    |                                  |                                                      |                                       |                         |
| <b>SU</b>                                                            | Suroh     |                                  |                                                      |                                       |                         |
| <b>UD</b>                                                            | Udac      |                                  |                                                      |                                       |                         |
| ▲                                                                    |           | ▲                                |                                                      | ▲                                     |                         |
| <b>NU</b>                                                            | <b>SP</b> | <b>40K</b>                       | <b>40K</b>                                           | <b>TO</b>                             | <b>PW</b>               |
| ▼                                                                    |           | ▼                                |                                                      | ▼                                     |                         |
| Single Phase<br>3 Phase In - 3 Phase Out<br>3 Phase In - 1 Phase Out |           | 10K w<br>20K w<br>40K w<br>80K w | <b>10K</b><br><b>20K</b><br><b>40K</b><br><b>80K</b> | Pure Sine Wave<br>Simulated Sine Wave |                         |
| <b>SP</b><br><b>33</b><br><b>31</b>                                  |           |                                  |                                                      | <b>PW</b><br><b>SW</b>                |                         |
| Phase                                                                |           | W Power                          |                                                      | Output waveform                       |                         |

| Example Part Number                                   |                |
|-------------------------------------------------------|----------------|
| Description                                           | Part Number    |
| Nurag 40KL Single Phase Tower Pure Sine Wave UPS unit | NUSP40K40KTOPW |

# Nurag 40KL

