



# Professional On-Line & Line-Interactive UPS Solutions True Double Conversion 1.0kVA - 20kVA & 30kVA - 800kVA

Output Power Factor 0.9 - Rack/Tower 2 in 1 Design - LCD Display - Perfect Battery Pack

## Eufo Series Line Interactive UPS 1.1 kVA/2.0 kVA/3.0 kVA – Rack/Tower 2 in 1 Design LCD Display / Single phase - Batter Pack Solution / Pure Sinwave

Rating from 1.1 kVA to 3.0 kVA, Eufo series provides server-grade full power protection from power failure, spikes and surge in small footprint with enhanced output power factor 0.8. Combining flexible rack/tower form factor and easy-shift LCD panel design, this series is perfect for networking, telecom, server and mission-critical applications

### Features & Advantages

- Pure sine wave output
- Output power factor 0.8
- User-friendly and easy-shift LCD design
- Rack/Tower 2 in 1 design
- Microprocessor-based line interactive design
- Built-in boost and buck AVR
- Programmable power management outlets
- ECO operation for energy saving (Efficiency Corrective Optimizer)
- With internal battery, but works with additional external battery pack too.
- Emergency power off function (EPO)
- Hot-swappable battery design
- Multiple communication available
- 3 years warranty for UPS, 2 years warranty for battery pack.
- Replacement in advance in service case.
- Warranty Extension & Express Service as optional.



Eufo 1.1/2/3 kVA with Battery Bank



Eufo 1.1/2/3 kVA Rack



1.1 kVA rear view



2.0 kVA rear view



3.0 kVA rear view



Battery Pack rear view

### Battery Box/Pack for Eufo Series 1.1 - 3.0 kVA UPS



**BB-24/18RT** (380 x 438 x 88 mm 2U)  
**BB-48/18RT** (480 x 438 x 88 mm 2U)  
**BB-72/18RT** (600 x 438 x 88 mm 2U)

| Battery Box | Capacity   | Batteries | Backup Time 100% Last (Min) |
|-------------|------------|-----------|-----------------------------|
| BB-24/18RT  | 24V / 18Ah | 4 pcs     | 25 Min (1.1 kVA UPS)        |
| BB-48/18RT  | 48V / 18Ah | 8 pcs     | 10 Min (2.0 kVA UPS)        |
| BB-72/18RT  | 72V / 18Ah | 12 pcs    | 10 Min (3.0 kVA UPS)        |

BB-24/18RT : Suitable for Eufo series 1.1 kVA UPS, Battery Pack Voltage :24 V  
BB-48/18RT : Suitable for Eufo series 2.0 kVA UPS, Battery Pack Voltage :48 V  
BB-72/18RT : Suitable for Eufo series 3.0 kVA UPS, Battery Pack Voltage :72 V  
Backup Time : Please see the following Backup Time Table  
RT : Suitable for Custos 9X+ Rack & Tower UPS, 2 in 1 Design

### Backup Time Table for Eufo Series 1.1 - 3.0 kVA UPS

| UPS Type                  | Battery Box                        | Backup Time                         | Backup Time with Last (Min) |     |     |     |     |
|---------------------------|------------------------------------|-------------------------------------|-----------------------------|-----|-----|-----|-----|
|                           |                                    |                                     | 100%                        | 75% | 50% | 25% |     |
| EU-1101RS<br>Rack 1.1 kVA | + 1xBB-24/18RT (4 x 9Ah Batteries) | Backup Time                         | 25                          | 36  | 57  | 112 |     |
|                           | + 2xBB-24/18RT (8 x 9Ah Batteries) | Backup Time                         | 60                          | 86  | 139 | 257 |     |
|                           | EU-1101TS<br>Tower 1.1 kVA         | + 3xBB-24/18RT (12 x 9Ah Batteries) | Backup Time                 | 98  | 152 | 221 | 358 |
|                           |                                    | + 4xBB-24/18RT (16 x 9Ah Batteries) | Backup Time                 | 153 | 218 | 280 | 512 |
| EU-1102RS<br>Rack 2.0 kVA | + 1x48/18RT (8 x 9Ah Batteries)    | Backup Time                         | 10                          | 17  | 28  | 60  |     |
|                           | + 2x48/18RT (16 x 9Ah Batteries)   | Backup Time                         | 26                          | 40  | 62  | 130 |     |
|                           | EU-1102TS<br>Tower 2.0 kVA         | + 3x48/18RT (24 x 9Ah Batteries)    | Backup Time                 | 44  | 60  | 100 | 230 |
|                           |                                    | + 4x48/18RT (32 x 9Ah Batteries)    | Backup Time                 | 69  | 94  | 163 | 288 |
| UPS Type                  | Battery Box                        |                                     | 100%                        | 75% | 50% | 25% |     |

|                            |                                     |             |    |    |     |     |
|----------------------------|-------------------------------------|-------------|----|----|-----|-----|
| EU-1103RS<br>Rack 3.0 kVA  | + 1xBB-72/18RT (12 x 9Ah Batteries) | Backup Time | 10 | 17 | 28  | 58  |
|                            | + 2xBB-72/18RT (24 x 9Ah Batteries) | Backup Time | 26 | 41 | 66  | 131 |
| EU-1103TS<br>Tower 3.0 kVA | + 3xBB-72/18RT (36 x 9Ah Batteries) | Backup Time | 43 | 62 | 107 | 225 |
|                            | + 4xBB-72/18RT (48 x 9Ah Batteries) | Backup Time | 68 | 92 | 167 | 270 |

| P | Model      | kVA     | Form  | Datasheet           | Brochure | Manual | SNMP Card  | Price Info |
|---|------------|---------|-------|---------------------|----------|--------|------------|------------|
| 1 | EU-1101-RS | 1.1 kVA | Rack  |                     |          |        |            |            |
| 2 | EU-1101-TS | 1.1 kVA | Tower |                     |          |        |            |            |
| 3 | EU-1102-RS | 2.0 kVA | Rack  | <a href="#">PDF</a> | PDF      | PDF    | Go to SNMP | Pricelist  |
| 4 | EU-1102-TS | 2.0 kVA | Tower |                     |          |        |            |            |
| 5 | EU-1103-RS | 3.0 kVA | Rack  |                     |          |        |            |            |
| 6 | EU-1103-TS | 3.0 kVA | Tower |                     |          |        |            |            |

| Specification |                  |                          |                 |
|---------------|------------------|--------------------------|-----------------|
| Model         | EU-1101RS/TS     | EU-1102RS/TS             | EU-1103RS/TS    |
| Phase         |                  | Single Phase with ground |                 |
| Capacity      | 1.1 kVA / 0.88kW | 2.0 kVA / 1.6kW          | 3.0 kVA / 2.4kW |

| Input                    |                                    |
|--------------------------|------------------------------------|
| Voltage Range            | 110/120 VAC or 208/220/230/240 VAC |
| Acceptable Voltage Range | 81 - 145VAV or 162-290 VAC         |
| Frequency Range          | 50Hz/60Hz (auto sensing)           |

| Output                       |   |
|------------------------------|---|
| Output Voltage               | 110/120 VAC or 208/220/230/240VAC                     |
| Voltage Regulation           | ± 3% (before Battery Alarm)                           |
| Frequency range (Batt. Mode) | 50 Hz ± 0.2 Hz or 60 Hz ± 0.2 Hz                      |
| Current Crest Ratio          | 3:1 (max.)  |
| Harmonic Distortion          | 8% max @ 100% linear Last ; 15% max @ non linear mode |
| Transfer Time                | 2-6ms (typical), 10ms max.                            |
| Waveform (Batt. Mode)        | Pure Sinewave   |

| Efficiency      |     |
|-----------------|-----|
| AC Line Mode    | 88% |
| Boost/Buck Mode | 90% |
| Battery Mode    | 85% |

| Battery        |                         |   |               |               |
|----------------|-------------------------|---|---------------|---------------|
| Standard Model | Battery Type            | 24 V  | 48 V          | 72 V          |
|                | Numbers                 | 2   | 4             | 6             |
|                | Typical Recharge Time   | 4 hours recover to 90% capacity                 |               |               |
|                | Charging Current (max.) | 1.0 A   |               |               |
|                | Float Charging Voltage  | 27,4 VDC ± 1%                                   | 54,6 VDC ± 1% | 82,1 VDC ± 1% |
| Long-Run Model | Battery Type            | 24 V  | 48 V          | 72 V          |
|                | Numbers                 | Depending on the capacity of external batteries |               |               |
|                | Typical Recharge Time   | Depending on the capacity of external batteries |               |               |
|                | Charging Current (max.) | 4.0 A or 8.0 A                                  |               |               |
|                | Float Charging Voltage  | 27,4 VDC ± 1%                                   | 54,8 VDC ± 1% | 82,1 VDC ± 1% |

| Indicators  |  |
|-------------|--|
| LCD Display | Last Level, Battery level, AC Mode, Battery Mode, Input Voltage, Output Voltage, Low Battery, OverLast and Fault Indicator |

| Alarm        |                             |
|--------------|-----------------------------|
| Battery Mode | Sounding every 10 seconds   |
| Low Battery  | Sounding every second       |
| OverLast     | Sounding twice every second |
| Fault        | Continuously sounding       |

| AC Input & Output Connectors |                 |                 |                               |
|------------------------------|-----------------|-----------------|-------------------------------|
| AC Input Connector           | 1 x IEC 320 C14 | 1 x IEC 320 C14 | 1 x IEC 320 C20               |
| AC Output Connector          | 8 x IEC 320 C13 | 8 x IEC 320 C13 | 6 x IEC 320 C13 / 1 x IEC C19 |

| Standards            |     |
|----------------------|-----|
| IEC 62040-1 (Safety) | YES |
| IEC 62040-2 (EMC)    | YES |
| CE                   | YES |

| Physical dimensions |                  |                            |                            |                            |
|---------------------|------------------|----------------------------|----------------------------|----------------------------|
| Standard Model      | Dimension (mm)   | 380 (D) x 438 (W) x 88 (H) | 480 (D) x 438 (W) x 88 (H) | 600 (D) x 438 (W) x 88 (H) |
|                     | Net Weight (kgs) | 14,23                      | 23,1                       | 32,24                      |
| Long-Run Model      | Dimension (mm)   | 380 (D) x 438 (W) x 88 (H) | 480 (D) x 438 (W) x 88 (H) | 600 (D) x 438 (W) x 88 (H) |
|                     | Net Weight (kgs) | 10,8                       | 14,0                       | 18,0                       |

| Environment |                                     |
|-------------|-------------------------------------|
| Humidity    | 20-90% RH @ 0-40°C (non-condensing) |

Noise Level

Less tahn 45dBa @ 1 Meter

**Management**

Smart RS-232 / USB

Supports Windows 2000/2003/XP/Vista/2008/7/8, Linux, Unix, and MAC

Optional SNMP

Power management from SNMP manager and web browser

*\*Product specifications are subject to change without further notice.*



**Professional On-Line & Line-Interactive UPS Solutions**  
**True Double Conversion 1.0kVA - 20kVA & 30kVA - 800kVA**  
 Output Power Factor 0.9 - Rack/Tower 2 in 1 Design - LCD Display - Perfect Battery Pack

**Eufo Series Line Interactive UPS**  
**1.1 kVA/2.0 kVA/3.0 kVA – Rack/Tower 2 in 1 Design**  
**LCD Display / Single phase - Batter Pack Solution / Pure Sinwave**

Rating from 1.1 kVA to 3.0 kVA, Eufo series provides server-grade full power protection from power failure, spikes and surge in small footprint with enhanced output power factor 0.8. Combining flexible rack/tower form factor and easy-shift LCD panel design, this series is perfect for networking, telecom, server and mission-critical applications

**Features & Advantages**

- Pure sine wave output
- Output power factor 0.8
- User-friendly and easy-shift LCD design
- Rack/Tower 2 in 1 design
- Microprocessor-based line interactive design
- Built-in boost and buck AVR
- Programmable power management outlets
- ECO operation for energy saving (Efficiency Corrective Optimizer)
- With internal battery, but works with additional external battery pack too.
- Emergency power off function (EPO)
- Hot-swappable battery design
- Multiple communication available
- 3 years warranty for UPS, 2 years warranty for battery pack.
- Replacement in advance in service case.
- Warranty Extension & Express Service as optional.



Eufo 1.1/2/3 kVA with Battery Bank



Eufo 1.1/2/3 kVA Rack



1.1 kVA rear view



2.0 kVA rear view



3.0 kVA rear view



Battery Pack rear view

**Battery Box/Pack for Eufo Series 1.1 - 3.0 kVA UPS**



BB-24/18RT (380 x 438 x 88 mm 2U)  
 BB-48/18RT (480 x 438 x 88 mm 2U)  
 BB-72/18RT (600 x 438 x 88 mm 2U)

| Battery Box | Capacity   | Batteries | Backup Time 100% Last (Min) |
|-------------|------------|-----------|-----------------------------|
| BB-24/18RT  | 24V / 18Ah | 4 pcs     | 25 Min (1.1 kVA UPS)        |
| BB-48/18RT  | 48V / 18Ah | 8 pcs     | 10 Min (2.0 kVA UPS)        |
| BB-72/18RT  | 72V / 18Ah | 12 pcs    | 10 Min (3.0 kVA UPS)        |

BB-24/18RT : Suitable for Eufo series 1.1 kVA UPS, Battery Pack Voltage :24 V  
 BB-48/18RT : Suitable for Eufo series 2.0 kVA UPS, Battery Pack Voltage :48 V  
 BB-72/18RT : Suitable for Eufo series 3.0 kVA UPS, Battery Pack Voltage :72 V  
 Backup Time : Please see the following Backup Time Table  
 RT : Suitable for Custos 9X+ Rack & Tower UPS, 2 in 1 Design

**Backup Time Table for Eufo Series 1.1 - 3.0 kVA UPS**

| UPS Type  | Battery Box                        | Backup Time | Backup Time with Last (Min) |     |     |     |
|-----------|------------------------------------|-------------|-----------------------------|-----|-----|-----|
|           |                                    |             | 100%                        | 75% | 50% | 25% |
| EU-1101RS | + 1xBB-24/18RT (4 x 9Ah Batteries) |             | 25                          | 36  | 57  | 112 |

|                                  |                                     |                    |             |            |            |            |
|----------------------------------|-------------------------------------|--------------------|-------------|------------|------------|------------|
| Rack 1.1 kVA<br><b>EU-1101TS</b> | + 2xBB-24/18RT (8 x 9Ah Batteries)  | <b>Backup Time</b> | <b>60</b>   | <b>86</b>  | <b>139</b> | <b>257</b> |
| Tower 1.1 kVA                    | + 3xBB-24/18RT (12 x 9Ah Batteries) | <b>Backup Time</b> | <b>98</b>   | <b>152</b> | <b>221</b> | <b>358</b> |
|                                  | + 4xBB-24/18RT (16 x 9Ah Batteries) | <b>Backup Time</b> | <b>153</b>  | <b>218</b> | <b>280</b> | <b>512</b> |
| <b>UPS Type</b>                  | <b>Battery Box</b>                  |                    | <b>100%</b> | <b>75%</b> | <b>50%</b> | <b>25%</b> |
| Rack 2.0 kVA<br><b>EU-1102RS</b> | + 1x48/18RT (8 x 9Ah Batteries)     | <b>Backup Time</b> | <b>10</b>   | <b>17</b>  | <b>28</b>  | <b>60</b>  |
| Tower 2.0 kVA                    | + 2x48/18RT (16 x 9Ah Batteries)    | <b>Backup Time</b> | <b>26</b>   | <b>40</b>  | <b>62</b>  | <b>130</b> |
|                                  | + 3x48/18RT (24 x 9Ah Batteries)    | <b>Backup Time</b> | <b>44</b>   | <b>60</b>  | <b>100</b> | <b>230</b> |
|                                  | + 4x48/18RT (32 x 9Ah Batteries)    | <b>Backup Time</b> | <b>69</b>   | <b>94</b>  | <b>163</b> | <b>288</b> |
| <b>UPS Type</b>                  | <b>Battery Box</b>                  |                    | <b>100%</b> | <b>75%</b> | <b>50%</b> | <b>25%</b> |
| Rack 3.0 kVA<br><b>EU-1103RS</b> | + 1xBB-72/18RT (12 x 9Ah Batteries) | <b>Backup Time</b> | <b>10</b>   | <b>17</b>  | <b>28</b>  | <b>58</b>  |
| Tower 3.0 kVA                    | + 2xBB-72/18RT (24 x 9Ah Batteries) | <b>Backup Time</b> | <b>26</b>   | <b>41</b>  | <b>66</b>  | <b>131</b> |
|                                  | + 3xBB-72/18RT (36 x 9Ah Batteries) | <b>Backup Time</b> | <b>43</b>   | <b>62</b>  | <b>107</b> | <b>225</b> |
|                                  | + 4xBB-72/18RT (48 x 9Ah Batteries) | <b>Backup Time</b> | <b>68</b>   | <b>92</b>  | <b>167</b> | <b>270</b> |

| P | Model      | kVA     | Form  | Datasheet           | Brochure | Manual | SNMP Card  | Price Info |
|---|------------|---------|-------|---------------------|----------|--------|------------|------------|
| 1 | EU-1101-RS | 1.1 kVA | Rack  |                     |          |        |            |            |
| 2 | EU-1101-TS | 1.1 kVA | Tower |                     |          |        |            |            |
| 3 | EU-1102-RS | 2.0 kVA | Rack  | <a href="#">PDF</a> | PDF      | PDF    | Go to SNMP | Pricelist  |
| 4 | EU-1102-TS | 2.0 kVA | Tower |                     |          |        |            |            |
| 5 | EU-1103-RS | 3.0 kVA | Rack  |                     |          |        |            |            |
| 6 | EU-1103-TS | 3.0 kVA | Tower |                     |          |        |            |            |

| Specification |                  |                          |                 |
|---------------|------------------|--------------------------|-----------------|
| Model         | EU-1101RS/TS     | EU-1102RS/TS             | EU-1103RS/TS    |
| Phase         |                  | Single Phase with ground |                 |
| Capacity      | 1.1 kVA / 0.88kW | 2.0 kVA / 1.6kW          | 3.0 kVA / 2.4kW |

| Input                    |                                    |
|--------------------------|------------------------------------|
| Voltage Range            | 110/120 VAC or 208/220/230/240 VAC |
| Acceptable Voltage Range | 81 - 145VAV or 162-290 VAC         |
| Frequency Range          | 50Hz/60Hz (auto sensing)           |

| Output                       |   |
|------------------------------|---|
| Output Voltage               | 110/120 VAC or 208/220/230/240VAC                     |
| Voltage Regulation           | ± 3% (before Battery Alarm)                           |
| Frequency range (Batt. Mode) | 50 Hz ± 0.2 Hz or 60 Hz ± 0.2 Hz                      |
| Current Crest Ratio          | 3:1 (max.)  |
| Harmonic Distortion          | 8% max @ 100% linear Last ; 15% max @ non linear mode |
| Transfer Time                | 2-6ms (typical), 10ms max.                            |
| Waveform (Batt. Mode)        | Pure Sinewave   |

| Efficiency      |     |
|-----------------|-----|
| AC Line Mode    | 88% |
| Boost/Buck Mode | 90% |
| Battery Mode    | 85% |

| Battery        |                         |   |               |               |
|----------------|-------------------------|---|---------------|---------------|
| Standard Model | Battery Type            | 24 V  | 48 V          | 72 V          |
|                | Numbers                 | 2   | 4             | 6             |
|                | Typical Recharge Time   | 4 hours recover to 90% capacity                 |               |               |
|                | Charging Current (max.) | 1.0 A   |               |               |
|                | Float Charging Voltage  | 27,4 VDC ± 1%                                   | 54,6 VDC ± 1% | 82,1 VDC ± 1% |
| Long-Run Model | Battery Type            | 24 V  | 48 V          | 72 V          |
|                | Numbers                 | Depending on the capacity of external batteries |               |               |
|                | Typical Recharge Time   | Depending on the capacity of external batteries |               |               |
|                | Charging Current (max.) | 4.0 A or 8.0 A                                  |               |               |
|                | Float Charging Voltage  | 27,4 VDC ± 1%                                   | 54,8 VDC ± 1% | 82,1 VDC ± 1% |

| Indicators  |  |
|-------------|--|
| LCD Display | Last Level, Battery level, AC Mode, Battery Mode, Input Voltage, Output Voltage, Low Battery, OverLast and Fault Indicator |

| Alarm        |                             |
|--------------|-----------------------------|
| Battery Mode | Sounding every 10 seconds   |
| Low Battery  | Sounding every second       |
| OverLast     | Sounding twice every second |
| Fault        | Continuously sounding       |

| AC Input & Output Connectors |                 |                 |                               |
|------------------------------|-----------------|-----------------|-------------------------------|
| AC Input Connector           | 1 x IEC 320 C14 | 1 x IEC 320 C14 | 1 x IEC 320 C20               |
| AC Output Connector          | 8 x IEC 320 C13 | 8 x IEC 320 C13 | 6 x IEC 320 C13 / 1 x IEC C19 |

| Standards            |     |
|----------------------|-----|
| IEC 62040-1 (Safety) | YES |

IEC 62040-2 (EMC)

YES

CE

YES

### Physical dimensions

|          |                  |                            |                            |                            |
|----------|------------------|----------------------------|----------------------------|----------------------------|
| Standard | Dimension (mm)   | 380 (D) x 438 (W) x 88 (H) | 480 (D) x 438 (W) x 88 (H) | 600 (D) x 438 (W) x 88 (H) |
| Model    | Net Weight (kgs) | 14,23                      | 23,1                       | 32,24                      |
| Long-Run | Dimension (mm)   | 380 (D) x 438 (W) x 88 (H) | 480 (D) x 438 (W) x 88 (H) | 600 (D) x 438 (W) x 88 (H) |
| Model    | Net Weight (kgs) | 10,8                       | 14,0                       | 18,0                       |

### Environment

|             |                                     |
|-------------|-------------------------------------|
| Humidity    | 20-90% RH @ 0-40°C (non-condensing) |
| Noise Level | Less tahn 45dBa @ 1 Meter           |

### Management

|                    |  |
|--------------------|--|
| Smart RS-232 / USB | Supports Windows 2000/2003/XP/Vista/2008/7/8, Linux, Unix, and MAC |
| Optional SNMP      | Power management from SNMP manager and web browser                 |

*\*Product specifications are subject to change without further notice.*