



ELEKTRON

Single Phase UPS from 6 - 20 kVA



3 LEVEL
UPS



UPS ONLINE



TOWER



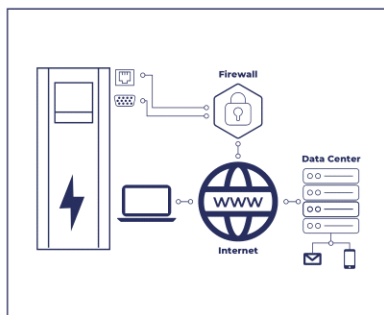
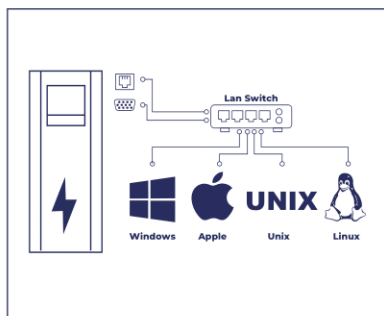
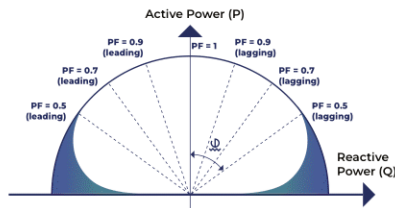
HIGH
EFFICIENCY



LI-ION
READY

SINGLE PHASE OUTPUT UPS FOR INDUSTRIAL APPLICATIONS

Three level Technology, Compact and Robust, Monoline is the perfect UPS to protect and supply loads in the industrial fields and critical applications.



- ◆ Three Level Technology
- ◆ On Line-Double Conversion Technology (Class VFI-SS-111)
- ◆ IGBT PWM Rectifier & Inverter Technology
- ◆ High Efficiency up to 96%
- ◆ Higher efficiency with eco mode up to 98%
- ◆ High Input Power Factor (≥ 0.99)
- ◆ Low Input THD ($\leq 5\%$)
- ◆ Increase battery life time up to 35% with smart charger
- ◆ Temperature compensation battery charging
- ◆ Higher fan life time with Intelligent fan speed control
- ◆ Operate as frequency converter (50 Hz / 60 Hz)
- ◆ Short Circuit, Overload, Lightning and Surge Protection
- ◆ Perfect Generator Compability
- ◆ Easy Service with Manual bypass
- ◆ Variable input low voltage depending on loading percentage (up to -40%)
- ◆ Parallelable with Common or Seperate Battery Cabinet
- ◆ Realtime warnings at LCD screen

SOFTWARE & CONNECTIVITY SOLUTIONS

- ◆ Local communication with RS232 and RS485
- ◆ 2 pcs configurable input contact
- ◆ Relay board with alarms
- ◆ Genset contact
- ◆ EPO contact
- ◆ USB
- ◆ Remote Monitoring Panel
- ◆ Battery Temperature Sensor for Charging
- ◆ JBUS, PROFIBUS Local Connection
- ◆ SNMP IT Manager Monitoring
- ◆ Environment Sensors for Data Centers (Humidity, Temperature, Smoke, etc.)
- ◆ GSM, Telnet, GPRS Communication
- ◆ PC & Server Shutdown
- ◆ Web Page Remote Monitoring
- ◆ Building Management System
- ◆ E-mail Alarm Reporting
- ◆ Remote Monitoring 24/7 Technical Service

| MODEL | 1106 | 1108 | 1110 | 1115 | 1120 |
|--|--|-------------|--|--------------------------|------|
| Nominal power (kVA) | 6 | 8 | 10 | 15 | 20 |
| General Specs | | | | | |
| Technology | Three Level On-Line Double Conversion VFI-111 | | | | |
| Waveform | Sinusoidal | | | | |
| Architecture | Stand Alone or Optional Parallel | | | | |
| Input characteristics | | | | | |
| Input voltage | 220, 230, 240 V 1PH+N+PE | | | | |
| Input frequency | 45-65 Hz | | | | |
| Voltage Tolerance (%100 load) | (-20)% (+20)% | | | | |
| Voltage Tolerance (%50 load) | (-40)% (+20)% | | | | |
| Input Power Factor | ≥ 1 | | | | |
| Input Current Harmonic | ≤ 5% | | | | |
| Output Characteristics | | | | | |
| Output Voltage | 220,230,240 V 1 Ph+ N+PE (Adjustable from front panel) | | | | |
| Output Voltage Tolerance | ±1% | | | | |
| Overall Efficiency (AC-AC) | Up to 96 % (At half load) | | | | |
| Ecomode Efficiency | Up to 98% (Optional) | | | | |
| Nominal Output Frequency | 50/60Hz +0,01 free run (Adjustable from LCD Panel) | | | | |
| Crest Factor | 3:1 | | | | |
| Output Power Factor | 0,9 (U2 model) / 1 (U1 model) / 0,8 (U3 model) | | | | |
| THD of Output Voltage | ≤2% (Linear load) & ≤5% (Non-linear load) | | | | |
| Bypass characteristics | | | | | |
| Overload Capability | 150% for 1 minutes | | | | |
| Bypass | Built in Automatic and Maintenance Bypass | | | | |
| Voltage Tolerance | ±10% | | | | |
| Batteries | | | | | |
| Battery Type | VRLA-AGM / GEL / NiCd / Li-ion | | | | |
| Battery Test | Automatic or Manual | | | | |
| Battery Recharge Time | <6h-8h | | | | |
| Charger Capacity | | | | | |
| U1/U2/U3 Model (max) | 1A | | 4A | | |
| with Charger Option | 4A / 13A | | | | |
| Battery Quantity | | | | | |
| with Internal Battery (12V 7/9Ah) | 14*/16/20** pcs | | 20/28* ⁴ pcs | 28 pcs (only on U2 & U3) | |
| External Cabinet with 4A Charger Option | A1: 20-30 pcs (Default 30 pcs) A2: 30-40 pcs (Default 30 pcs) A3: 40-46 pcs (Default 40 pcs) | | A2: 30-40 pcs (Default 30 pcs) A3: 40-46 pcs (Default 40 pcs) | | |
| External Cabinet with 13A Charger Option | 30-46 pcs (Default 30 pcs - Adjustable from LCD Panel) | | | | |
| Communication and Accessories | | | | | |
| LCD Display | Graphical LCD Screen, Led Bar Status | | | | |
| Communication ports (Optionals) | RS485, Genset, SNMP, GSM Modem, Relay Contacts, Input Contacts, Modbus and USB | | | | |
| Accessories (Optional) | Galvanic Isolation Transformer, Remote Monitoring Panel | | | | |
| Physical Characteristics | | | | | |
| Dimensions H x W x D (mm) | 700X220X420 | 635X256X580 | 635X256X580* ³ 735X256X673 | 735X256X673 | |
| Net Weight (kg) | 25 | 30 | 38/30* ³ | 40/38* ³ | 42 |
| Ambient Conditions | | | | | |
| Operating temperature (°C) | 0°C - 40°C | | | | |
| StorageTempature | -15°C+ 55°C | | | | |
| Relative Humidity (%) | < 95% Not Condensing | | | | |
| Altitude | < 1500m | | | | |
| Noise (at 1 meter) | <55 dBA | | | | |
| Protection Class | IP 20 (Higher Ip Ratings are Optional) | | | | |
| Compliance | | | | | |
| Referance Product Standards | EN 62040-1-1 (Safety), EN 62040-2 (EMC), EN 62040-3 (Performance) | | | | |