itel Energy

IPV-1K612U

# Off-Grid Inverter



## IPV-1K612U

### High PV Input Power

1 MPP Tracker, PV Input Power up to 3200W
Max. Solar Charging Current up to 140A

### High Efficiency

MPPT Efficiency >99%
Maximum Battery Mode Conversion Efficiency 94%

### Highly User-friendly Design

Low noise performance with perfect heat dissipation
Looks like a home appliance with stunning apperance
LCD Display with physical button

### Powerful Performance

110%~150% Load @ 30s
Intelligent time-of-use (TOU) mode

### Solid Quality

IP54 Protection Design integrated with replaceable dust filter for harsh environmental condition
Warranty 3 years

| Model | IPV-1K612U |
|---|---|
| **Efficiency** | |
| MPPT Efficiency | >99% |
| Max. Battery Mode Conversion Efficiency | 94% |
| **PV Input** | |
| Max. PV Input Power (W) | 3200 |
| Max. PV Input Voltage (V) | 450 |
| Start-up Voltage (V) | 30 |
| MPPT Voltage Range (V) | 35-400 |
| Max. Input Current (A) | 20 |
| Number of MPPT | 1 |
| Number of Strings per MPPT | 1 |
| **AC Input** | |
| Nominal Input Voltage (Vac) | 230 |
| Input Voltage Range (Vac) | 90~280 |
| Max. AC Input Current (A) | 9.5 (Bypass Mode) |
| Nominal Operating Frequency (Hz) | 50/60 |
| **AC Output** | |
| Nominal AC Output Power (W) | 1600 |
| Max. Output Apparent Power (VA) | 2000 |
| Nominal AC Output Voltage (Vac) | 220/230/240 (L+N+PE) |
| Max. Output Current (A) | 9.1 |
| Total Current Harmonic Distortion | <3% |
| Nominal AC Frequency (Hz) | 50/60 |
| Surge Power (VA) | 3200 @ 5s |
| Overload Capability | 110%~150% Load @ 30s,<br>≥150% Load @ 5s |
| **Battery** | |
| Battery Type | Lead-acid/Lithium-ion/User Defined |
| Rated Voltage (V) | 12 |
| Battery Voltage Range (V) | 10.5-15 |
| Max. Solar Charging Current (A) | 140 |
| Max. Mains/Generator Charging Current (A) | 80 |
| Max. Discharging Current (A) | 140 |
| **General** | |
| Dimensions (L*W*H, mm) | 237*305.6*100 |
| Net Weight (kg) | 5 |
| Operating Temperature Range (°C) | -25 ~ +60 (>45°CPower Derating) |
| Max. Operating Altitude (m) | 3000 (>2000m Power Derating) |
| Communication | WIFI/RS485/RS232 |
| Diesel Generator Support | Not Support |
| Smart Load Support | Not Support |
| Parallel Capability | Not Support |
| Cooling Method | Intelligent Fan Cooling |
| Noise Level (dB) | ≤50 |
| Authentication Level | IEC62109-1, IEC62109-2, IEC61683 |
| **Protection** | |
| Ingress Protection | IP54 |
| Overvoltage Protection | Yes |
| Overload Protection | Yes |
| Short Circuit Protection | Yes |
| Over Temperature Protection | Yes |
| Surge Protection | DC: TYPE III; AC: TYPE III |

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