

# EMERGENCY LIGHTING - GOLD PLUS STATIC INVERTER UNIT



Single Phase 1.5kVA to 20kVA

## BENEFITS

### Performance

- Pure sine wave output
- Higher lighting levels when compared to self contained emergency lighting, making them ideal for high risk task emergency lighting requirements
- Most standard AC luminaires can be used, no need for modification. It should be ensured that all fittings selected for emergency lighting comply with EN60598-2-22, therefore must not be 2 pin, have glow starters or be lamps with built in starters
- More energy efficient than self contained offering cost savings year on year

### Installation

- Removable top entry gland plate
- Integral 100mm plinth to allow good manouverability
- Smaller cable ratings compared to traditional AC/DC systems
- Front access enclosure keeping footprint to a minimum

### Operational

- Central point for maintenance and testing therefore less disruption to daily working routines
- Front access cubicles for ease of maintenance and safe access to circuit breakers

## KEY FEATURES

- Pure sine wave inverter
- Fully compliant with BS EN 50171:2001
- Different outputs available
- Battery deep discharge protection
- Full LCD and LED display with mimic diagram for full user information
- Enclosure protection IP21 as standard (options up to IP54 available)

The Gold Plus range of Static Inverter Units offer a reliable and proven solution for Emergency Lighting requirements including an inverter specifically designed to power lighting loads.

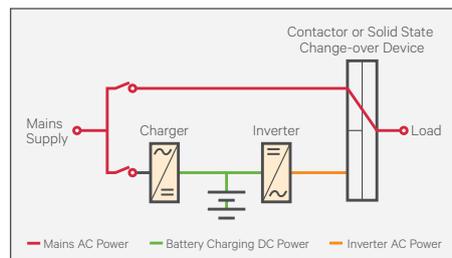
The units are compact, easily maintained and fully compliant to BS EN50171:2001

### System Operation

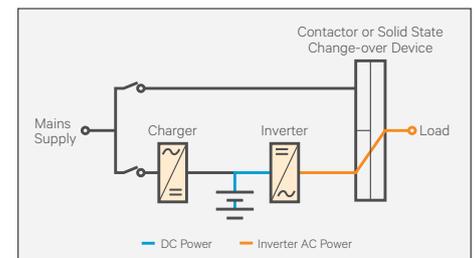
The Gold Plus offers different systems to meet project specific requirements.

#### Active Standby

Mains Healthy

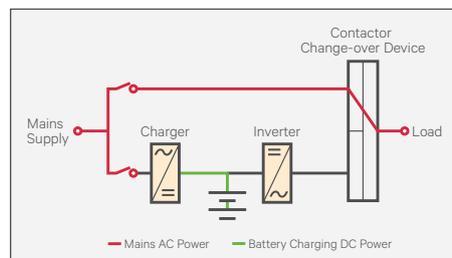


Mains Failed

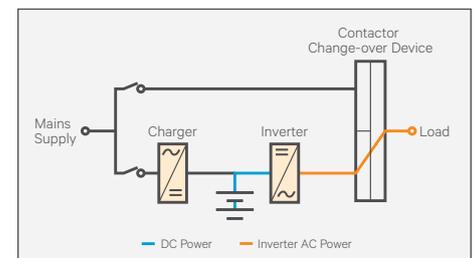


#### Passive Standby

Mains Healthy



Mains Failed



### Applications

- Commercial
- Retail
- Hotels
- Sports and Leisure Facilities
- Cinemas
- Museums
- Airports
- Hospitals
- Manufacturing



**SYSTEM INPUT**

Voltage: 230VAC 1ph or 400VAC 3ph

Voltage range: +/- 10%

Frequency: 50Hz +/- 5%

**SYSTEM OUTPUT**

Voltage: 230VAC 1ph

Voltage regulation: +/- 1%

Output frequency: 50Hz

Frequency regulation: +/- 0.1%

Wave form: Sine wave

DC / AC Efficiency: &gt;90%

Load power factor: 0.7 lag to 0.9 lead

Overload: 120% continuous

Operating temperature: 0 to 40°C (inverter only)

Recommended battery operating temperature range for optimum life and performance is 20°C +/- 5°C

**LCD DIGITAL METER READINGS**

Mains input - voltage and frequency

Inverter - AC voltage / current / kVA / % load / frequency

DC volts

DC discharge current

Charge current

**ALARMS**

Mains Fail

Charge fail

Inverter fail

Boost charge (NiCd batteries only)

Battery Disconnected

DC over voltage

Battery test - 10 minute / rated standby test

Auto test

Inverter overload

Short circuit

Over temperature

Battery under voltage

**FULLY COMPLIANT WITH THE FOLLOWING STANDARDS**

Emergency lighting EN 50171

Safety EN 62040-1

EMC Emissions EN 61000-6-3

EMC Immunity EN 61000-6-2

**Technical Data****Enclosure**

- 2mm Zintec Steel - RAL 7035
- Key lockable doors
- Front access enclosure
- Top cable entry with removable gland plate
- Access to circuit breakers via front hinged and lockable cover
- IP21 for standard enclosures (options up to IP54 available)

**Battery Charger**

- Microprocessor controlled, power factor corrected
- Temperature compensated
- Constant voltage, current limited rectifier
- Protection against reverse battery polarity
- Protection against battery over voltage, input mains low and mains surges
- Low volts disconnect

**Inverter**

- High frequency microprocessor controlled PWM IGBT inverter
- Pure sine wave output
- Galvanic isolation with ground neutral

**Load Circuit**

- Single or multiple outputs can be offered as maintained, non maintained or a combination of both
- Changeover Contactor (passive standby)
- Electronic Switching Device (active standby)

**Remote Monitoring**

- Volt free contact for: Common Alarm, Mains Fail, Charge Fail, Overload
- Remote alarm contact rating: 1A, 24V DC

**Datalogger**

- 200 alarm records and 200 battery records can be accessed via the display

**Manual Battery Test**

- A 10 minute test and deep discharge test are selectable via the display

**Auto Battery Test**

- A weekly or monthly test can be selected via the display

**Display**

- Consists of 4 x 20 character LCD Dot-Matrix with LED indication and scrolling command buttons