

# ZPB600-48

## 600W SINGLE OUTPUT BATTERY CHARGER



DS-080 Issue 04

Thank you for your interest in Zitel - we are a UK based manufacturer of PAGA and Intercom products. Our systems are mainly designed for use in the Hazardous Oil, Gas and Petrochemical industries.

Consequently our products are very robust and designed to comply with international standards.

Please do not hesitate to contact us for further information on our products we look forward to working with you on a project soon...



### ZITTEL PB600 BATTERY CHARGER

---

*2/3/8 stage charging*

*Universal AC input/full range*

*Built-in active PFC function PF>0.95*

*Protection: Reverse polarity, short circuit, over voltage and over temperature*

*Charger for lead-acid batteries*

*Built-in remote on/off control*

*Built-in temperature compensation function*

*Built-in fan speed control*

*Small size, light weight - space saving*

*ZEST energy efficient - consumes less power than conventional design*

*Dynamic Diversity Supervision - checks all associated critical paths, provides early warning of deterioration*

*Integral 3 colour LED status display - detailed battery diagnostics, rapid fault finding*

*3 years warranty*

---

The Zitel ZEST ZPB600-48 industrial battery charger module is designed to provide reliable, efficient service in mission critical life dependant alarm and voice broadcast applications.

The robust design is based upon a high efficiency switch mode charger housed in a compact industry standard extruded alloy

---

#### ZITTEL LIMITED

email: [sales@zitel.com](mailto:sales@zitel.com) web: [www.zitel.com](http://www.zitel.com) tel: +44 (0) 115 9202888  
mail: 96 Rolleston Drive, Arnold, Nottingham, NG5 7JP United Kingdom

All text, drawings and photography contained within this data sheet are the property of Zitel Ltd and are subject to copyright. Information may neither be transmitted or copied to third parties without the express written consent of Zitel Ltd. Zitel Ltd have a policy of continuous product improvement and contents here in are liable to change without notice.

The intelligently controlled, multi-stage charging of Valve Regulated maintenance free Lead Acid (VRLA) battery piles incorporates the following features:

- **Temperature Compensation**
- **Over voltage protection**
- **Short circuit protection**
- **Over temperature protection**

Integral surge control and soft start limits in-rush current to the normal working current of the unit thereby preventing spurious operation/tripping of the associated protective circuit breaker.

The ZPB600-48 incorporates critical path supervision which auto checks wiring from the battery to the load. This includes the charger wires and any intermediate protective devices.



***Target VRLA lead acid battery pile delivers no break 48 VDC secure supply to host equipment rack power consumers.***

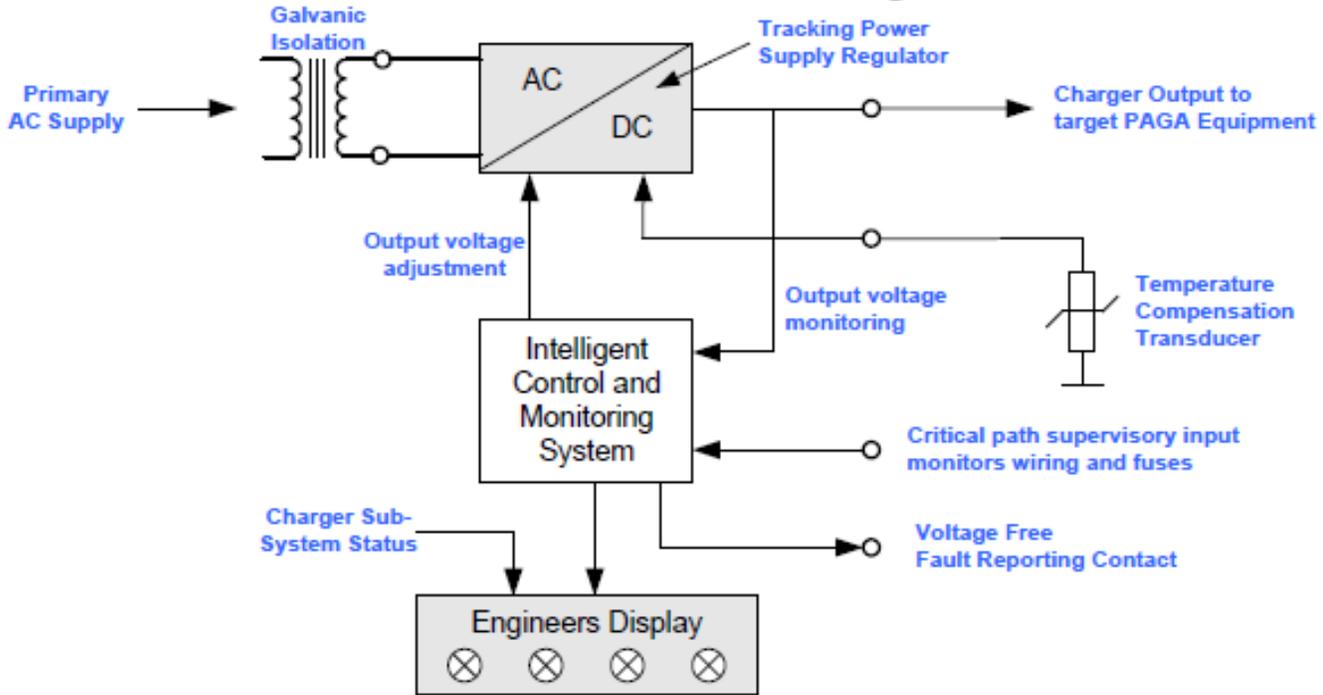
---

ZIZTEL LIMITED

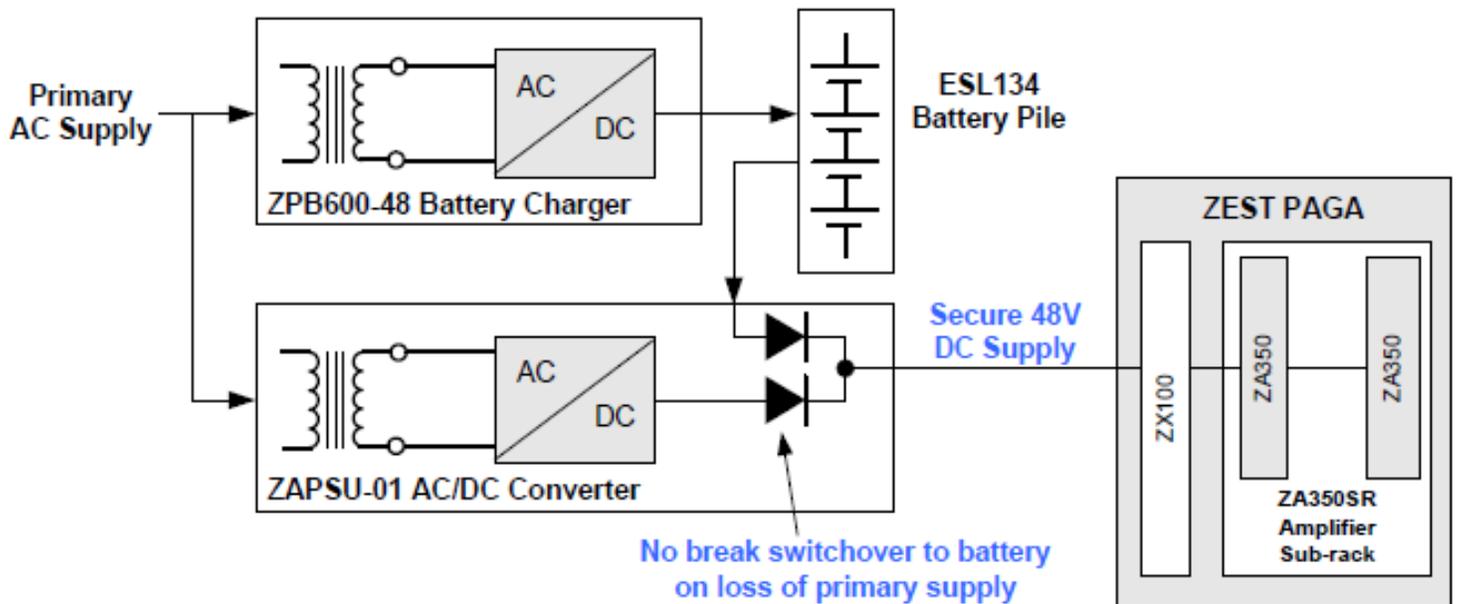
email: [sales@ziztel.com](mailto:sales@ziztel.com) web: [www.ziztel.com](http://www.ziztel.com) tel: +44 (0) 115 9202888  
mail: 96 Rolleston Drive, Arnold, Nottingham, NG5 7JP United Kingdom

All text, drawings and photography contained within this data sheet are the property of Ziztel Ltd and are subject to copyright. Information may neither be transmitted or copied to third parties without the express written consent of Ziztel Ltd. Ziztel Ltd have a policy of continuous product improvement and contents here in are liable to change without notice.

## ZPB600-48 Block Diagram



## ZEST 'no break' Power Supply Architecture

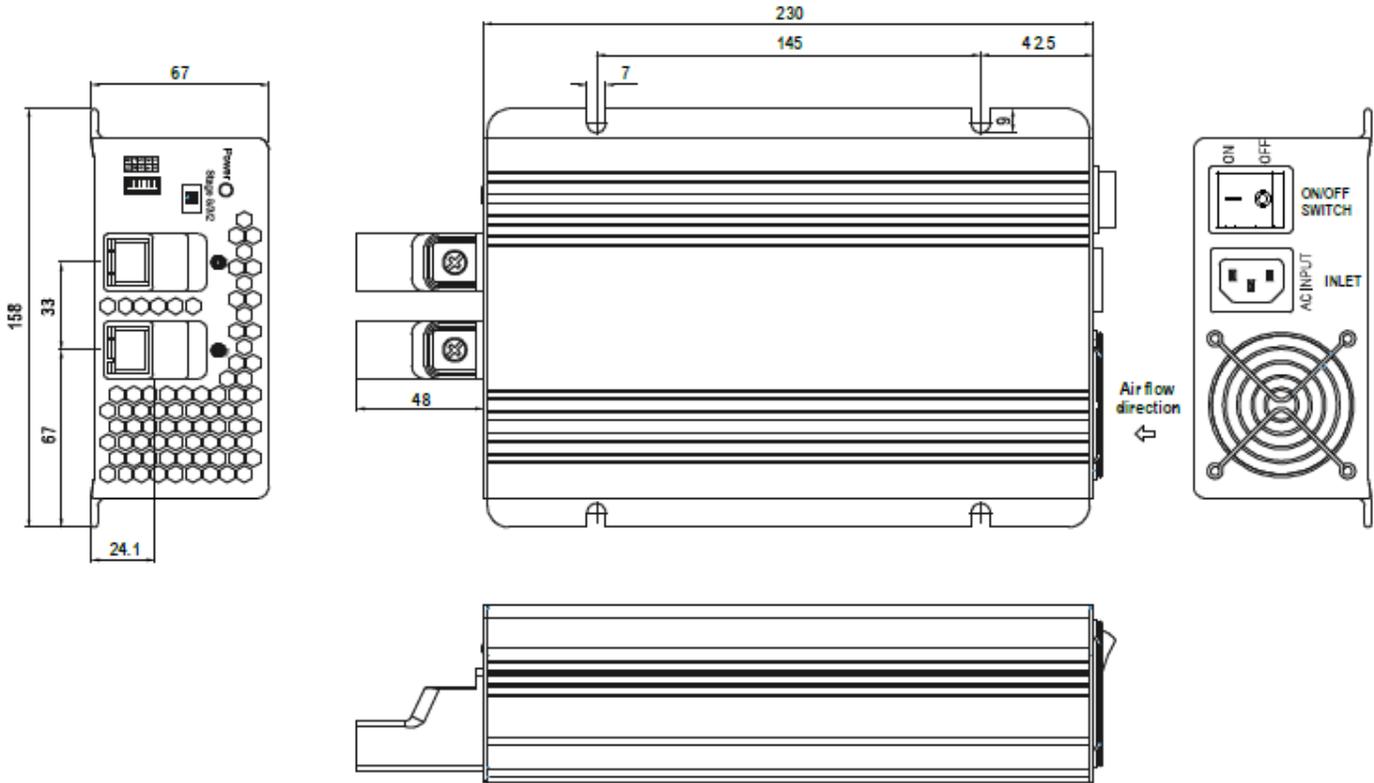


ZIZTEL LIMITED

email: [sales@ziztel.com](mailto:sales@ziztel.com) web: [www.ziztel.com](http://www.ziztel.com) tel: +44 (0) 115 9202888  
 mail: 96 Rolleston Drive, Arnold, Nottingham, NG5 7JP United Kingdom

All text, drawings and photography contained within this data sheet are the property of Ziztel Ltd and are subject to copyright. Information may neither be transmitted or copied to third parties without the express written consent of Ziztel Ltd. Ziztel Ltd have a policy of continuous product improvement and contents here in are liable to change without notice.

# Mechanical Specification



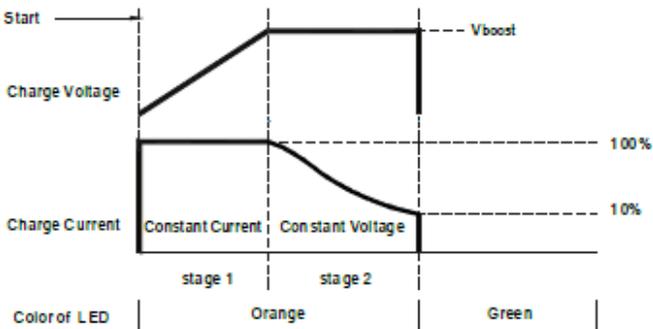
Control Pin No. Assignment(CN100) : HRS DF11-10DP-2DS or equivalent

Pin No.	Assignment	Pin No.	Assignment	Mating Housing	Terminal
1,2	RY13	8	NTC(5K $\Omega$ )	HRS DF11-10DS or equivalent	HRS DF11-10SC or equivalent
3,4	NC	9	RC-		
5,6	RY15	10	RC+		
7	GND				

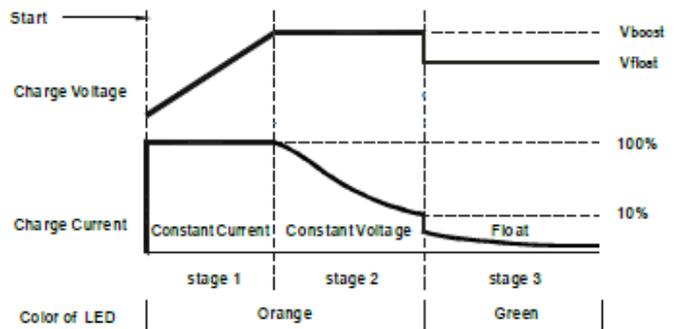
RY13 : Battery bank OK    NTC / GND : Temperature sense  
 RY15 : Charging OK      RC+ / RC- : Remote ON/OFF

# Charging Curve

2 Stage



3 Stage



ZIZTEL LIMITED

email: [sales@ziztel.com](mailto:sales@ziztel.com) web: [www.ziztel.com](http://www.ziztel.com) tel: +44 (0) 115 9202888  
 mail: 96 Rolleston Drive, Arnold, Nottingham, NG5 7JP United Kingdom

All text, drawings and photography contained within this data sheet are the property of Ziztel Ltd and are subject to copyright. Information may neither be transmitted or copied to third parties without the express written consent of Ziztel Ltd. Ziztel Ltd have a policy of continuous product improvement and contents here in are liable to change without notice.

<b>Technical Specification</b>	
<b>Electrical</b>	
Power Supply Input	90 to 264V AC (47 to 63 Hz)
DC output	Multi stage nominal 48 V DC auto float / boost charge
Power Consumption	1kVA/1kW maximum
Efficiency	89% Typical
<b>Mechanical</b>	
Weight	~5kg
Size	280mm (D) x 200 (W) x 88.5mm (H)
Construction	Anodised alloy fascia and chassis
Finish	Natural alloy
<b>Environmental</b>	
Temperature Range	-20°C to +70°C
Humidity	25 to 85% non-condensing
Vibration	1g (any direction)
Service Location	Safe Area Internal

---

ZIZTEL LIMITED

email: [sales@ziztel.com](mailto:sales@ziztel.com) web: [www.ziztel.com](http://www.ziztel.com) tel: +44 (0) 115 9202888  
 mail: 96 Rolleston Drive, Arnold, Nottingham, NG5 7JP United Kingdom

All text, drawings and photography contained within this data sheet are the property of Ziztel Ltd and are subject to copyright. Information may neither be transmitted or copied to third parties without the express written consent of Ziztel Ltd. Ziztel Ltd have a policy of continuous product improvement and contents here in are liable to change without notice.