



Battery chargers  
Power supplies  
Control systems

# Reliable, performance **POWER**

Your mission is critical. You need constant, reliable power. So naturally you have backup systems: generators, engines, pumps, lighting, inverters...

But what gets these systems started every time, and keeps them on-line? Computronic advanced charging and control features ensure your battery and DC power systems are always available, at peak performance, with maximum reliability and service life.

Computronic has the expertise, products and proven reliability for:

- standby/float, always-on battery charging: engine-driven gensets, pumps, telecoms
- cyclic battery charging: vehicle, mobile and portable equipment
- panel mounted, standalone or custom battery/DC power systems
- 1 to 100 Amp current rating, at 12/24/48/110 VDC and non-standard voltages
- advanced charger features: switch mode technology, multi-stage charging, low ripple output, temperature compensation, fault warnings and remote data communications
- third-party and OEM standards compliance: UL, CSA, FM, NFPA, ISO9001

Your batteries are a critical investment - both as a capital purchase, and as a business cost if the power fails. Talk to us now about how we can improve your DC power security.

## SENTINEL 300P SENTINEL 300PC



- Switch mode power supply technology
- High power 10A rating @ 12 or 24V, optional paralleling for higher current outputs
- <1% output ripple, for charging sealed or vented lead acid or NiCd cells
- DIP switch or RS485 & PC software programmability of battery type, charge regimes & alarm output trip voltages
- Optional 4 line x 20 character display and datacomms by RS485/CANbus SAE J1939
- Efficient, low heat dissipation
- Temperature compensation
- Auto boost
- Alarm output options
- Protective cover or stainless steel enclosure versions
- UL approval to BBGQ: UL-1236, CSA22.2 no107.2

## SENTINEL 150 SENTINEL 150P



- Switch mode technology
- 5 or 10A max @ 12 or 24V
- <1% output ripple, suitable for charging sealed or vented lead acid or NiCd cells
- Compact & lightweight
- Power efficient, low heat dissipation
- Temperature compensation
- Auto boost
- Alarm output options
- Protective cover or stainless steel enclosure versions
- UL versions approved to BBGQ: UL-1236, CSA22.2 no107.2

## GUARDIAN



- Patented low-impedance transformer technology
- Heavy duty 10A or 20A max @ 12 or 24VDC
- Low output ripple, <1%
- Temperature compensation
- Auto boost
- 3 alarm outputs, NFPA110 compliance
- UL-approved to UL1236, CSA22.2
- Open frame or wall mounted, stainless steel enclosure models

## FP Fire Pump models



- Chargers and current rate optimised for diesel driven, standby fire pump batteries
- UL approved compliance with:
  - UL1236 SB
  - CSA22.2
- "FP" variants of open frame Sentinel 300P or Guardian models

## NFPA models



- Battery chargers compliant with NFPA standards.
- UL approval to :
  - QWIR: UL1236 SC
  - BBHH: UL1236 SE
- NFPA variants of:
  - Economical Enclosed Sentinel 150
  - Versatile Enclosed Sentinel 300P

## SENTRY SENTRY 7 SENTRY UL



- Proven thyristor-based charging
- For vented lead-acid or NiCd cells
- 12 or 24V; 3, 5 or 10A ratings
- Short circuit and reverse polarity protected
- UL1236 approved models
- Temperature compensation, Autoboot and alarm output options (Sentry 7 and UL models)
- Open frame or stainless steel enclosure models

## SM series



- Switch mode technology
- Power efficient, with low heat dissipation
- Compact & lightweight
- <1% output ripple, suitable for wet lead acid, sealed VRLA or Planté cells
- Flexible modular system. Some modules allow series/parallel connection for higher currents or voltages
- Universal 95 - 277 VAC supply
- Open circuit board, DIN rail mount, protective cover and wall-mounted enclosure options
- Includes models:
  - SM50(A)
  - SM82(A)
  - SM2 150
  - SM2 250(A)
  - SM heavy duty
- Options for multi-stage charging, temperature compensation, manual boost and alarm outputs
- Non-standard OEM variants

## SW series EQUALISER



- Desktop chargers & power supplies
- Fully automatic charge regulation
- LED indication of charge status
- Model options include:
  - switchable supply voltage
  - switchable output for various cell types and multiples
  - lead acid cell temperature monitoring and protection

## LVD & CVR relays



- 11-pin plug-in relays
- ### LVD
- disconnects battery from load on sustained low voltage
  - prevents deep discharge and permanent damage to batteries
- ### CVR
- independent relay outputs for signalling high & low DC voltage

## CUSTOM DC POWER



- industrial charger and DC power systems, customised to OEM specification
- engine starting, off-line charging, industrial, telecoms and medical applications
- open-frame, DIN rail, rack mount or enclosed panel designs
- 1 to 100 Amp power ratings
- standard or non-standard output voltages
- options with or without batteries

## BATTERIES



- VRLA and NiCd batteries
- variants for standby or cyclic applications
- 0.8 - 355 Ah ratings
- supplied separately, or as part of a complete DC power system

# Battery and DC Power Systems

- Rapid charge recovery
- Maximum power and capacity
- Fault diagnostics and warning
- Increased reliability and lifetime

# Stop Damaging Your Batteries

Problem:

**90% of industrial engine "fail to starts" are due to battery problems**

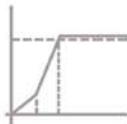
Cause:

**Incorrectly specified battery chargers:**

- **Undercharging**
  - poor power performance, plate sulphation, reduced battery life
- **Overcharging**
  - gassing, overheating, electrolyte loss and plate distortion
- **High charge ripple**
  - damages VRLA batteries

Solution:

**CCL advanced charger features:**



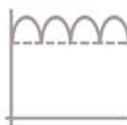
## Multi-stage, intelligent charging

- Constant, maximum current during charge recovery phase
- Automatic reversion to float mode when charge complete



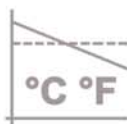
## Optimised calibration

- Not all lead acid batteries are the same
- OEM/user-selectable or factory-set float and boost levels, optimised for wet lead acid, AGM, Gel, Calcium and other cell types



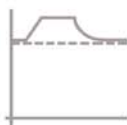
## Low output ripple

- High ripple (typically > 5%) will damage VRLA batteries and invalidate the manufacturer's warranty
- Smooth output with low ripple (<1%) is ideal for all battery types, and essential for VRLA cells



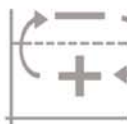
## Temperature compensation

- Battery manufacturers specify float voltages for 20°C/68°F
- Output voltage automatically adjusts with ambient temperature, for maximum battery performance, reliability and lifetime
- Optional remote temperature sensor



## Auto boost

- Automatically boosts and equalises cell charge, improving battery performance and life
- Initiated by automatic sensing or manual switch
- Automatic return to float mode prevents overcharge and gassing



## Protection

- Reverse polarity protection
- Short circuit protection
- Automatic current limit, e.g. during engine cranking



## Control & information

- Alarm outputs (charge fail, high/low battery volts), for system protection and operator warning
- LCD indication of status and battery/charger parameters
- CANbus SAE J1939 & RS485 data communication capability
- Programmable operation



## Standards compliance

- CE, UL1236, CSA22.2, NFPA, FM, ISO9001
- Major OEM approvals



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