



SECURITAC

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This attachment to the SECURITAC final report contains a series of publishable images from the project. Pages 2 and 3 are a copy of the SECURITAC brochure.



Security systems (including fire, intrusion, access control, and voice alarm) typically contain an AC-DC power supply to deliver power to the system and to charge and maintain 12V batteries, which provide the "secondary source" during a mains failure. The combined power supply-charger-battery system represents a key component of such systems in terms of cost and contribution to system reliability.



For the SME manufacturer and installer, the manufacturing, inventory, document control, and service costs associated with the provision of a wide range of power supplies to address the market is significant. In addition, as amendments are made to the applicable EN standards (EN54-4, EN50131-6, etc) manufacturers are often required to re-design, re-test and re-certify each power supply design, which represents significant actual and opportunity costs.

SECURITAC is a 2-year European research project, funded by the European Commission, as part of the 7th Framework Programme.

The project has developed a unique stackable power supply module for security systems, in which 1 to 4 modules may be stacked (parallel connected) to deliver the required total output power (up to 260W).



Features

- 65W output per module: 13V/5A or 26V/2.5A versions
- Compliant with EN54-4/A2 and EN50131-6
- With power factor correction (PFC)
- May be stacked (parallel connected) to provide up to 260W output, and offer redundancy.
- DIN rail mountable
- Selectable charger current: 0.4A/0.8A per module
- Microcontroller, provides self-test with fault indication, remote diagnostics, and future proofing via firmware
 Customizable I/O via add-on board and modules
- I2C bus communications
- Reduced inventory, certification, and production test costs for manufacturers
- To be manufactured by project SMEs, and made available as an OEM module.
- Possibility of licensing the design to other manufacturers

SECURITAC stackable, battery-backed, 12/24V power supply





For further information and availability, please contact the project partners

SMEs

- IFAM GmbH Erfurt

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- CanTech s.r.o Potocni 40. 78701-Sumperk, Czech Republic Tel: +420 583 250 991 www.cantech.cz cantech@cantech.cz

- EDS Electronik Destek San.TIC.LTD.STI Meclis Mah. Kilic Sok. No:4, Sarigazi. 34785-Istanbul, Turkey Tel: +90 216 528 450 0 www.eds.com.tr eds@eds.com.tr

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Research Centers

Project Coordinator:

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High reliability, low cost, stackable power supply for security systems



Project Number FP7-SME-2007-1-222444



14 June 2011







Project Logo



Showing how the modules are "stacked", by pressing them together, with 5.08mm Eurostyle connectors at the rear proving electrical connection and mechanical support



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Image of four 26V/2.5A fire modules stacked



Main PCB, which takes 230VAC main input and delivers up to 26V/2.5A (or 13V/5A -manufacturer configurable). Contains active power factor correction, battery charger, and a microprocessor for control, fault indication, serial communications and provision of load sharing.







Two 26V/2.5A fire modules stacked and mounted on a DIN rail



Four 26V/2.5A fire modules stacked and mounted in SME partner (IFAM) explosion protection product during SME demonstration







SME partner EDS testing the performance and power factor of two stacked modules over a range of AC mains input voltage



SME partner IFAM testing one module, removed from its housing







Presentation of FP7 projects, including SECURITAC to scientists, researchers and industry by CRIC at the EU Research Connection '09 Congress in Prague on 07/05/2009



Dissemination of Securitac to industry by EDS at the Electrotech'10 (energy, electric and electronic technologies) trade fair in Istanbul on 25-28 Feb 2010.







Presentation of the digital controller scientific paper to the scientific community and industry by IET PhD student Lajos Török at the PEMD2010 conference in Brighton, UK on 19/04/2010



External dimensions of the housing