

SynQor Announces World's Smallest Full Patient Contact Medical Grade Power Supply

3" x 5" x 1.44" package achieves a power density of up to 18.3 Watts per cubic inch at 91% efficiency

SynQor continues its successful diversification into new markets with the introduction of its first AC/DC product designed specifically for Medical Applications. The ACuQor® range of Power Supplies pack **300W or 400W** of useable power into just 3" x 5" x 1.44", which is believed to be the World's smallest footprint for the power level. The ACuQor can also be packaged in dual and triple-modules delivering power up to 1200W. SynQor brings to the design of its ACuQor series of AC/DC products the same level of technical innovation that has made it a leader in the DC/DC marketplace, achieving an efficiency level of 91%. Single outputs of 48V, 36V or 24V are available to facilitate the use of Distributed Power Architectures and battery backup, and to directly drive components such as fans, motors, pumps, lamps and actuators.



The ACuQor family operates over a universal input range of 85-264Vrms and 47-63Hz making it suitable for World-Wide deployment. Full output power is available up to 50°C with natural convection (derates linearly to 300W at 70°C). A transient power rating of 500W is possible for up to 5 seconds in the open frame version, and even longer in a proprietary encased version. Active Power Factor Correction is incorporated to a level >0.98 enabling compliance with IEC/EN61000-3-2. Both AC lines are internally fused.

The ACuQor models include versions designed for both BF (direct patient contact) and CF (direct cardiac contact) applications in accordance with UL/EN60601-1. Input Earth Leakage Current and type CF Patient Leakage Current are well below the requirements of the standard at <110uA and <4uA respectively. There is also the option of ordering defibrillation rated models that incorporate the minimum output to protective earth creepage & clearance distances and withstand the defibrillator pulse test guidelines of UL/EN60601-1. Conducted noise emissions are below Level B limits of EN55011/55022, FCC part15.

A host of additional control and signaling inputs & outputs are offered including a 5V "always on" standby power output, a DC power good signal, AC power good signal, remote enable input, and a fan status output / fan enable input function. Over current, over voltage and over temperature protection with auto recovery is also built into the unit. The operating temperature range is 0 to +70°C.