



## Off-grid solar backup devices are becoming increasingly attractive

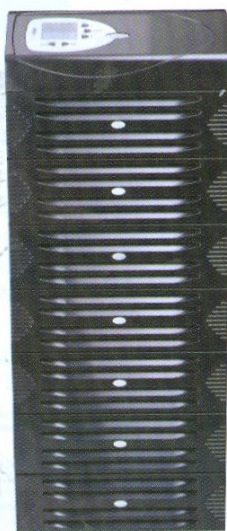
Consul Consolidated Pvt Ltd, a Chennai-based manufacturer of UPS systems and voltage stabilizers, recently acquired controlling stake in Megatech Power Equipments Ltd, a Pune-based company engaged in solar power packs, inverters and UPS systems. *Electrical Monitor* caught up with **Sriram Ramakrishnan**, CEO, Consul Consolidated Pvt Ltd to know more about the acquisition and how this move could shape the road ahead for Consul. An interaction by **Venugopal Pillai**.

**What was the rationale behind picking up equity stake in Megatech Power Equipments Ltd? How did it score over other companies in its peer group?**

Megatech Power Equipments Ltd is a leading solar power pack, inverter and UPS manufacturer based in Pune. Megatech's focus on product development and proven track record of developing reliable and innovative power electronic solutions was attractive. The product portfolio of Megatech complements Consul's product portfolio and will allow us to market Megatech's product through Consul's Pan India sales and service network. We believe Megatech's focus on product development in India for the Indian power and site conditions will help us deliver tailored value added solutions to our customers.

**Please discuss the scope of off-grid solar backup devices and solutions. Would rural India be an interesting market to look out for?**

The power supply issues faced by business and consumers across the country are well documented given the large gap between power generation and demand. Electricity demand will only continue to grow as India's per capita electricity consumption was about 600 kwh in 2009, leaving it far



below the world average of 2700 kwh. Coupled with a transmission and distribution network which is an ageing infrastructure and has one of the highest T&D losses in the world, this means that the quantity and quality of delivered power is unreliable today and will continue to be poor in the foreseeable future.

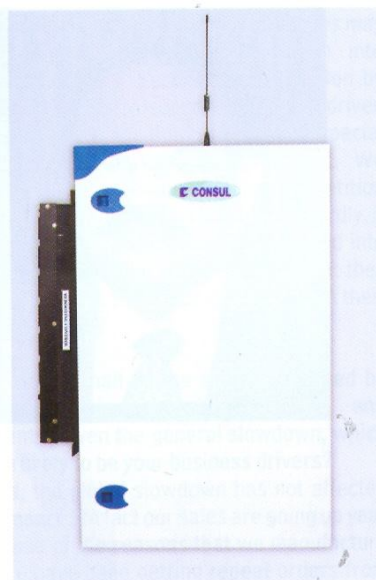
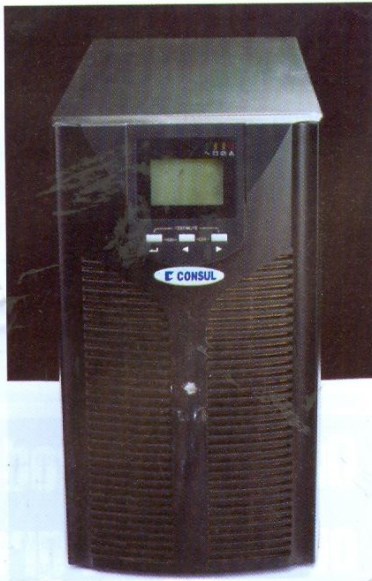
In this context, customers are looking for an alternate backup source of power to the grid and off-grid solar power packs are an option for many customers. With the increasing cost of diesel and reducing cost of solar PV

panels, off-grid solar back-up devices have become increasingly attractive for variety of back-up applications even in urban and semi urban areas. In rural India, where the availability of power is very limited, off-grid solar power solutions can serve as an alternate power generation source given that most parts of rural India are blessed with sufficient solar irradiation (insolation) for optimum solar power generation through the year. In fact, Megatech has done several projects for primary health care centers located in rural areas of Maharashtra where the solar power plant is the primary source of power for lights and for preserving vaccines in refrigerators.

**Please tell us more on how the Megatech range of products would complement your own wide range of power backup and conditioning products.**

Consul is known for its wide range of UPS and servo stabilizer products and Megatech gives us access to a complementary range of solar power packs and inverter products. With Megatech, Consul can now offer a comprehensive portfolio of power backup and power conditioning products to ensure the optimal solution can be delivered for every customer requirement. Further, with a





pan-India service network of over 250 factory-trained service engineers, customers can be assured of local support for the products supplied by Consol. Megatech offers a range of innovative power electronic products like off-grid solar inverters and solar power conditioning units (PCUs) which are developed for Indian power and site conditions. Megatech is among the first Indian manufacturers of off-grid solar solutions which have been tested and approved to IEC Standards. Megatech has an installation base of around 3 mw off-grid solar installations in India, providing us a solid reference base to offer robust solar power products to our customers across India. Megatech also has an extensive range of back-up inverters used for emergency lighting applications in retail sector, hospitals and commercial offices and also has delivered over five thousand innovative Emergency Lift Operating System (ELOS) to ensure uninterrupted operation of elevators and lifts used in high rise buildings and apartments. Megatech inverters and ELOS with battery backup provide a green, cost effective power backup alternative to diesel gensets.

**Give us some insight into the power backup and conditioning**

**equipment industry. At what rate is the industry growing and how to see the evolving role of renewable energy-based devices like solar?**

The power conditioning and power backup industry is critical for the uninterrupted operations of any economy. As technology adoption among business in India escalates, companies' need for backup power has also increased. Increased awareness for quality of power has boosted the demand for power conditioning products like UPS and stabilizers as companies find it imperative to opt for protection against voltage fluctuations and low voltage. With India assuming a key role in the Asian economy, businesses have attuned themselves to the fact that they need to have robust infrastructure to attract and retain investors. Hence, uptime is being viewed strategically and upcoming businesses realize the importance of factoring and aligning it as a key component in the overall business model.

According to us some of the key factors driving the growth of the power backup and power conditioning market in India are:

- Growth in the economy has led to increased spending by IT/ITES thereby leading to increased demand for power conditioning for power

hungry IT equipment

- With world going digital not just in IT/ITES but also in engineering industry, hospitals, banking, retail and the need for efficient power conditioning is growing
- With public sector organizations like India post, railways going digital, a huge spend in terms of back-up power is required in these verticals too
- The spread of the banking and telecom industries into semi-urban and rural areas represents another growth opportunity for power back-up and conditioning products.
- Another factor that drives the demand is the increased penetration of companies emerging in tier-2 and tier-3 cities where operating costs are low but power scarcity is significant

We believe the power conditioning and backup market presents an enormous potential with current estimate as per the recent statistics showing that the Indian power conditioning and backup market is poised to cross Rs.10,000 crore by 2017-18. This represents an exciting growth opportunity that Consol will tap through investment in technology, expansion of manufacturing, addition of distribution channels and acquisition of companies with unique offerings.