

## PLUSS to provide transport, storage solution to Dr Reddy's for Sputnik V vaccine

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**Celsure COVID SURAKSHA box with patent 'phase change material' will be able to maintain -18°C temperature**



Pluss Advanced Technologies (PLUSS) will supply its Celsure COVID SURAKSHA box to Dr Reddy's Laboratories, for optimal temperature-controlled transport and storage for the Sputnik V vaccine, in India. PLUSS' patented Celsure box with 'Phase Change Material (PCM)' technology will control and maintain the temperature, currently minus 18 degree centigrade (-18°C), required to ensure the efficacy of the Sputnik V vaccine.

A separate specialised conditioning centre has been set up locally in Hyderabad with a fleet of Rapid PCM Recharging Stations and mechanisms built for Track and Trace. This model meets the highest standard of cold-chain supply management and is highly scalable to meet the country's demand for vaccine doses in a short period of time.

The Celsure COVID SURAKSHA box can maintain inside temperature passively, without electricity, at desired levels for more than 100 hours and serve as an energy-efficient and safer alternative to refrigerated containers, conventional ice-packs or even dry ice, which are considered hazardous, unsustainable and unsafe for carrying in airlines.

Besides Sputnik V, Celsure is also available in variants that offer precise freeze-free 2 to 8°C addressing use cases both at first and the last mile for carrying freeze sensitive vaccines. The use of traditional ice packs kept the vaccines exposed to the risk of freezing, one of the highest contributors to global vaccine wastage.

The Celsure box can also be customized to maintain inside temperatures in over 40 different ranges, from -77°C to +89°C, for a time ranging from a few hours to a few days. This allows maintenance of the integrity of pharmaceutical products, including vaccines, during transit, dispensing the need of electricity or fuel-powered cold rooms, refrigerated trailer trucks or refrigerators at vaccination sites.

PLUSS has received a patent in the US and Europe for its Celsure box, for the innovative method of arranging PCMs which leads to precise inside-temperature control, under varying ambient conditions. PLUSS has applied for a patent for its Celsure box in India, Singapore and Brazil, as well.

