

## C1000



The power behind competitiveness

## Delta Central Series

### Product Features

- Peak efficiency 98.84%
- Wide DC input voltage range 520-1000V
- Compact size
- IP65 protection level
- Integral DC & AC disconnects
- Integral type II SPD at DC & AC side
- Easy maintenance
- Built-in Anti-PID function \*
- SVG functionality \*
- Scalable up to 5MW configurations

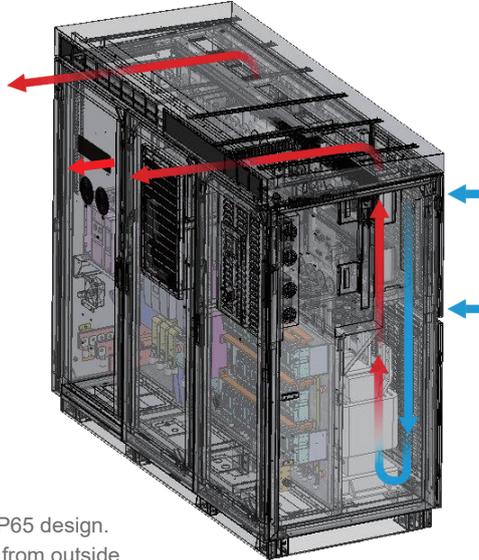
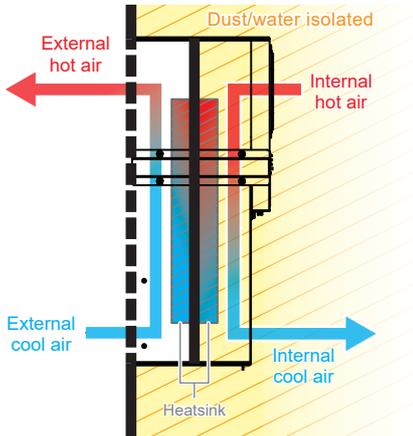
# Delta Central PV Inverter

## High quality enclosure for outdoor environment

IP65 protection level enclosure and corrosion resistant features ensure the inverter protection in both indoor and outdoor environment. Building an additional control room for inverters is no longer necessary. Cost can be considerably saved with IP65 design.



## Heat exchanger



Delta C1000 central PV inverter is designed with cool air flow circulation feature. There are air suction inlets at the back side of the enclosure which allows cool air inflow thereby reducing the system temperature. The hot air will flow out from top of the enclosure to create a perfect air flow circulation.

The enclosure isolates all the electronic components into the front compartment with IP65 protection level to prevent any possible interferences from the air circulation or dusts from outside.

- Enhance heat-sink capability while keeping IP65 design.
- Heat exchanger can isolate the dust & water from outside.

## High durability & compact size design

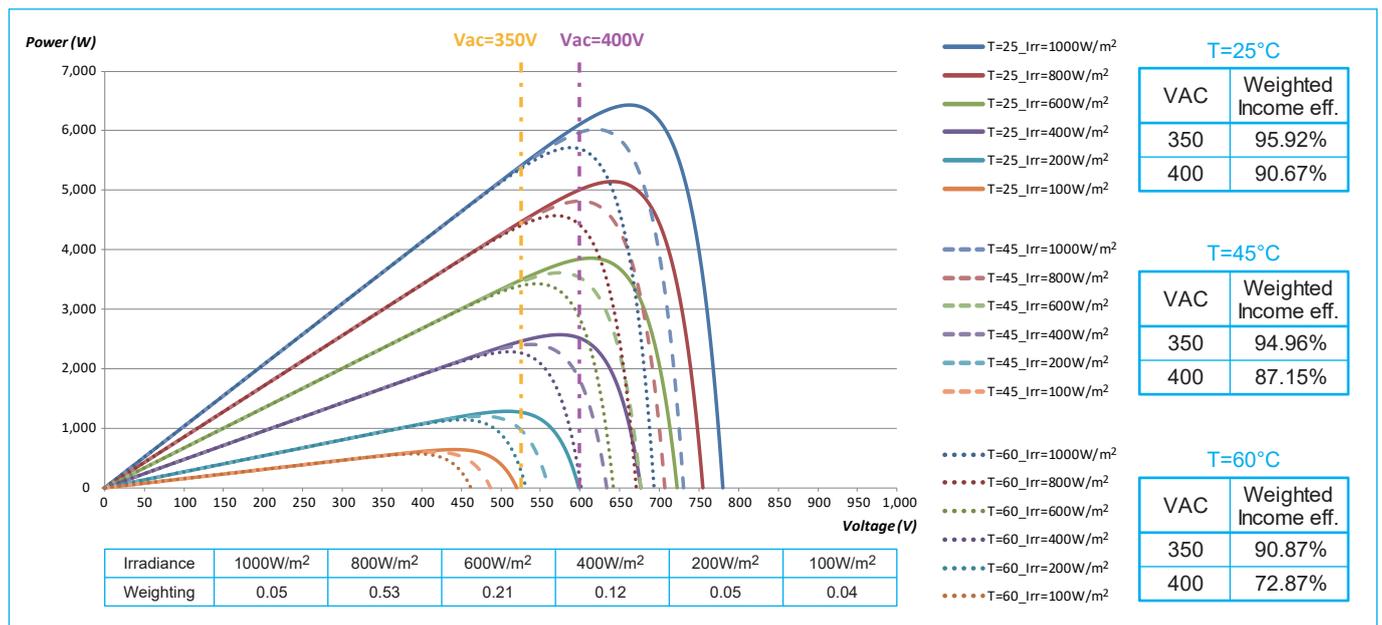


IP65 design can totally isolate the electrical compartments from unexpected intrusion. (water, sand and bugs ... etc.)  
 Traditional container design still has risk of intrusion due to not sufficient protection level of inverter itself.  
 The most compact size design (W2100 x H1980 x D950) makes the site design more flexible, minimizing the costs for the land requirement.

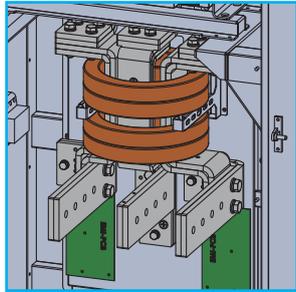
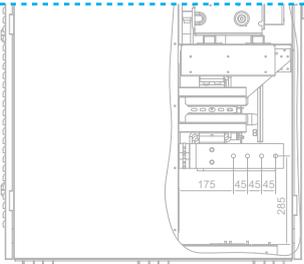
# Grid Voltage Design Optimization

For single stage inverter, 350Vac has better income efficiency than 400Vac, which brings the customer more revenue.

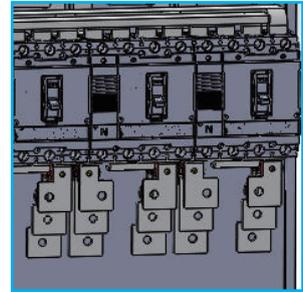
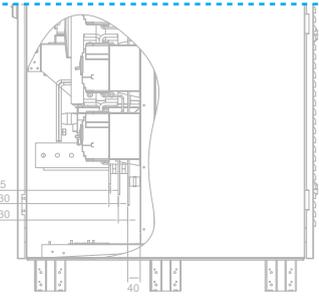
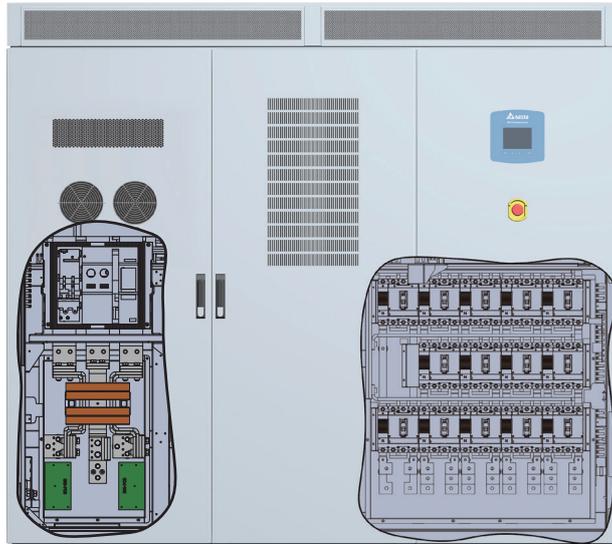
- Use 350W panel with 18 strings as an example



# Installation of AC/DC Side



The view of AC side



The view of DC side

- 1 pcs AC Breaker (2000A/690Vac) with  $\Phi 13$  (M12 screw used) connection busbar.
- Max. allowable cable size is 300 mm<sup>2</sup> (Aluminum/Copper\*) and max. 8 runs per phase.

- 14 runs DC input with  $\Phi 11$  (M10 screw used) connection busbar.
- Each input is protected by DC Breaker (250A/1000V)
- Max. allowable cable size is 240 mm<sup>2</sup> (Aluminum/Copper\*)

\* Delta would highly recommend that the material surface of copper wire / aluminum wire lug should be tin or nickel electroplated.

## Scalable Design

4MW Unit...

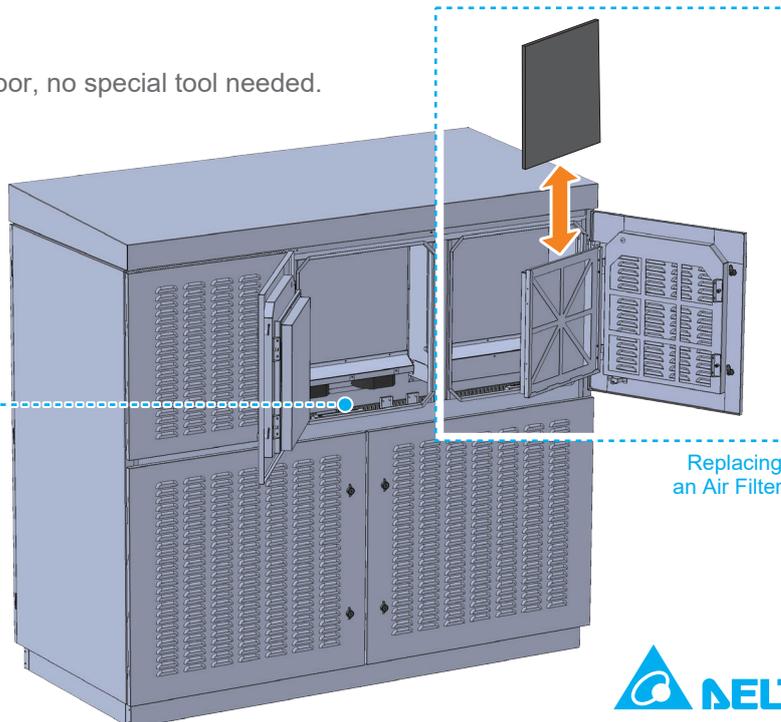
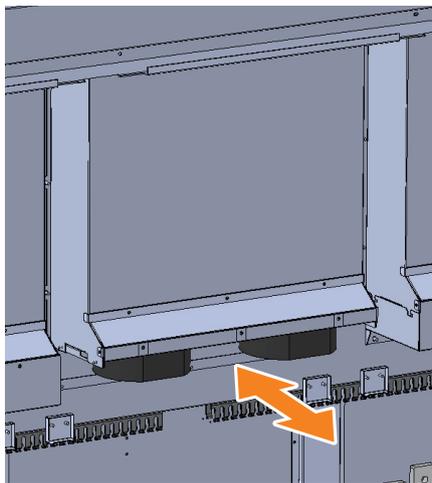
5MW Unit...

\* Multi-windings transformer is required.

# Easy Maintenance

Fan/filter maintenance by opening the back door, no special tool needed.

Replacing a Fan Module



Replacing an Air Filter

## Technical Specifications

Model		C1000	
DC Input	Max. Voltage	1100V	
	Operating voltage range	520~1000V	
	MPPT voltage range	550~850V	
	Start up voltage	570V	
	MPPT tracker	1	
	Input current limitation	2050A	
	Input terminal type	Ring terminal lug (M10, Max. 150mm <sup>2</sup> )	
	Protection	Type 2 SPD	
	Max. runs	14	
	DC Disconnect Device	DC Breaker (250A/1000Vdc)	
AC Output	Rated power	1000kW / 1000kVA	
	Max. power	1000kW / 1000kVA	
	Max. output current	1650A	
	Rated voltage/grid type	3Ph 350V (3P3W/Δ)	
	Operating voltage range	-10~+10%	
	Frequency range	50/60Hz ±5Hz	
	Power factor (Adjustable)	0.8 ind ~ 0.8 cap	
	Protection	Type 2 SPD	
	THD	<3% (at rated power)	
	Nighttime power consumption	<55W	
Efficiency	Peak efficiency	98.84%	
	EUR efficiency	98.40%	
Information	Communication port	RS-485	
	Display	5" Graphic LCD	
Regulatory		IEC61683	
		IEC61727	IEC60068
		IEC62109-1/2	GB/T: 19964: LVRT
		IEC62116	CQC_NB/T 32004-2013
		IEC 61000-6-2	CNCA/CTS 0002-2014
		IEC 61000-6-4	CNCA/CTS 0048-2014
General Data	Operating temperature range	-25~60°C (>50°C derating)	
	Protection level	IP65	
	Operation elevation	<3000m	
	Cooling	Forced Air cooling plus smart fan control	
	Dimension (W x H x D, mm)	2100 x 1980 x 950	
	Weight	1740kg	

- All specifications are subject to change without prior notice.

**\* Anti-PID function:**

C1000 has built-in Anti-PID function which can prevent/compensate the PID effect on PV modules.

**\* SVG (Nighttime reactive power):**

C1000 can generate reactive power at night to meet the utility's requirements to compensate/stabilize the grid.

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