

CTP Grid Box

EX Series (400/500)



The CTP grid box is a turnkey grid protection and integrated energy trading solution. It is manufactured and pre-programmed to meet the specific requirements of each of Australia's DNSPs.

The Grid Box is installed between the PV inverters and site's main switchboard. This provides a "plug and play" solution to secondary protection and grid integration for solar installers, retailers and PPA providers. We provide products that assist our clients to obtain grid connections quickly, safely and reliably.

The Grid Box – EX series offers secondary protection where unrestricted export OR soft limit export control as per AS4777.1-2016 is permitted and is suitable for installation on commercial PV systems.

Grid Box Features

- Approved secondary protection
- Indicator lamps
- Back-up generator inter-trip
- Remote monitoring interface
- Indoor / outdoor rated
- Commissioning test points
- Pattern-approved Meter for LGC / PPA
- Optional surge protection

Grid Box Benefits

Turn-key: Pre-installed and pre-programmed solution, Turn-key protection and metering package, Single point of contact;

High quality: Designed by experts, customised according to the specific needs of your projects, Expert technical support, professional customer support;

Reliability: Overall compliant with NER, CER & AS/NZ standard requirements;

Financial transparency: No hidden costs. No ongoing cost. Full coverage during warranty period.



Grid Box – EX Series – 400/500 kW

EX400 EX500 EX-PP + SL165 EX-PP + SL250				
Product*	EX400-20	EX400-8H	EX500-24	EX500-10H
	SL400-20+EX-PP	SL400-8H + EX-PP	SL500-24+ EX-PP	SL500-10H+ EX-PP
Electrical Specifications				
PV System Sizes (KVA)	300-400 KVA	300-400 KVA	400-500 KVA	400-500 KVA
Number of 3-Ph Inverters	Up to 20	Up to 8 (High-Capacity)	Up to 24	Up to 10 (High-Capacity)
Max Inverter Current	3-Ph 63A	3-Ph 100A	3-Ph 63A	3-Ph 100A
Switchgear Rating	630A	630A	800A	800A
Form Rating	2bi			
Fault Rating	36 kA			
Switchgear Compliance Standards	AS3000, AS3008, AS60947, AS60898, AS3439.1			
Protection Relay	ABB CM-UFD.M33			
Protection Functions (ANSI)	27, 59, 81H, 81L, 78, 81R, 47			
Protection Relay Compliance Standards	AS4777.1, EN50581, IEC/EN 60255-1, IEC/EN 60255-127, IEC/EN 60255-26, IEC/EN 60255-27, IEC/EN 61000-6-2, IEC/EN 61000-6-3, UL508, CAN/CSA C22.2 No. 14			
DNISP Compatibility**	All DNISPs across Australia (except Horizon Power)			
Mechanical Specifications				
Maximum size conductor	4×1C 240mm ² (spreaders can be added for more cables)			
Dimensions (H x W x D)	2000 mm x 2100mm x 425mm	2000 mm x 2600mm x 425mm		
IP Ratings	IP 56 (with rain hood), IP42 (rain hood removed)			
Cable Entry	IP42 - Top and Bottom; IP56 - Bottom only			
Mounting	Wall - out of direct sun exposure			
Construction Material	1.6 mm Mild Steel			
Colour	Electric Orange (standard), White, Grey, Vintage Green			
Temperature	-20°C to 65°C within enclosure (approx. -20°C to 45°C ambient)			
Additional Features				
Standard	<ul style="list-style-type: none"> - Back-up Generator Inter-trip - Commissioning Test-points - Connections for additional slave switchboard - Indicator Lights - Remote Monitoring (webservice) for Meter 			
Optional	<ul style="list-style-type: none"> - Integration of smart meters for ramping (Fronius, SMA, Solaredge) - Surge Diverter - General power outlet 			

*Custom Grid Boxes can be made to accommodate your project needs. Please contact CTP for details

** Each DNISP requires different protection set points pre-programmed as part of Grid Box

CTP also offers a complete range of services to assist your project from Concept to Commissioning. We can design custom grid integration solutions for PV projects at any scale.

Contact us for more details - enquiries@clean-tech.com.au