

CTP Grid Box

EX Series (30/65/100)



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
- 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 - Up to 100kW

EX30 EX65 EX100 EX-PP + SL30 EX-PP + SL65 EX-PP + SL100					
Product*	EX30-2	EX65-2	EX65-6	EX100-2	EX100-6
	SL30-2+EX-PP	SL65-2 + EX-PP	SL65-6 + EX-PP	SL100-2+ EX-PP	SL100-6 + EX-PP
Electrical Specifications					
PV System Sizes (KVA)	10-30 KVA	30-65 KVA	30-65 KVA	65–100 KVA	65–100 KVA
Number of 3-Ph Inverters	Up to 2	Up to 2	Up to 6	Up to 2	Up to 6*
Max Inverter Current	3-Ph 50A	3-Ph 100A	3-Ph 63A	3-Ph 160A	3-Ph 63A
Switchgear Rating	50A	100A	100A	160A	160A
Form Rating	1				
Fault Rating	25 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				
DNSP Compatibility**	All DNSPs across Australia (except Horizon Power)				
Mechanical Specifications					
Maximum size conductor	70mm ² (Solid core cable, maximum lug width 19mm)				
Dimensions (H x W x D)	1000 mmx 700mm x 305mm				
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 Interfaces 				
Optional	<ul style="list-style-type: none"> - Integration of smart meters for ramping (Fronius, SMA, Solaredge) - Surge Diverter - General power outlet - Pattern-approved Meter for LGC / PPA - Remote monitoring (webserver) for Meter 				

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

** Each DNSP 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