

CTP Grid Box

EX Series (165/250)



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 – 165/250 kW

| EX165 EX250 EX-PP+ SL165 EX-PP+ SL250 | | | | |
|---|---|--|-----------------|----------------------------|
| Product* | EX165-8 | EX165-4H | EX250-12 | EX250-6H |
| | SL165-8+EX-PP | SL165-4H + EX-PP | SL250-12+ EX-PP | SL250-6H+ EX-PP |
| Electrical Specifications | | | | |
| PV System Sizes (KVA) | 100-165 KVA | 100-165 KVA | 165-250 KVA | 165-250 KVA |
| Number of 3-Ph Inverters | Up to 8 | Up to 4 (High-Capacity) | Up to 12 | Up to 6 (High-Capacity) |
| Max Inverter Current | 3-Ph 63A | 3-Ph 100A | 3-Ph 63A | 3-Ph 100A |
| Switchgear Rating | 250A | 250A | 400A | 400A |
| 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 | | | |
| DNISP Compatibility** | All DNISPs across Australia (except Horizon Power) | | | |
| Mechanical Specifications | | | | |
| Maximum size conductor | 120mm ² | 240mm ² (enquire within for larger sizes) | | |
| Dimensions (H x W x D) | 1600 mmx 900mm 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 - Remote monitoring (webserver) for Meter - 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