

TCS-1202I

SOLAR TRACK CIRCUIT UNIT

PIVOT
engineered to endure

SOLAR POWERED 12V SYSTEM -2 TRACK CIRCUITS

Model TCS-1202I, solar-powered track system. A complete 12 Volt system utilising a 150W solar panel to charge an internal 12VOLT VRLA battery providing power for two isolated DC track feeds.

The system utilises 2 constant-current track circuit controllers, such that differences in cell voltage, track loop resistance and relay coil resistance are automatically accommodated. Leakage resistance can be accounted for by using slightly higher current settings in sites subject to inundation.

The electronics enclosure is a sloping roof enclosure with heat shields and insect-proof venting for operation in harsh environments. The system is typically supplied with a 4m galvanised steel pole and a 150W solar panel. A standard connection box for the track circuit is provided, attached by fixed gooseneck to the support pole.



FEATURES

- Complete remote 12volt power system for 2 track circuits
- Sloping roof enclosure with heat shields & insect proof vents
- 3-point locking
- Supplied with pole, enclosure, track circuit connection box, solar panel & bracket, bird spikes, solar charging module, 2 x PTC-400B track circuit control modules
- No exposed cables
- Regulated cell voltage

Options

PTC-400B replacement controller

ORDERING DETAILS

10142 Solar Powered 12V System -2 Track Ccts
10103 Control Module PTC-400B

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Specifications

SOLAR INPUT

Input voltage range	12-18VDC (for charging)
Input current	8.2A maximum
Solar panel rating	12V nominal, 150W
Input connectors	MC4

BATTERY

Cell type and voltage	SLA, AGM, 12V nominal
Number of cells	6 cells in series
Cell capacity	133ah nominal (80 ~200ah)
Backup time	2 track feeds at 400mA each, 15 days with no solar input

CHARGER

Temperature compensation	-12mV/°C above 25°C
Maximum charging current	20A
Over-temperature charging cutoff	60°C

TRACK CIRCUIT CONTROLLER

Number of outputs	2 (may be used with 2 relays in parallel)
Track circuit current	80mA to 400mA in 12 steps
Maximum track-circuit voltage (no load)	2.5V
Maximum loop resistance	10 Ohms @ 120mA
Wiring connections	Standard connection box with M6 studs.

GENERAL

Thermal monitoring	Power converter (internal), enclosure temperature
Indicators	LED (green) indicating charger output.
Fault protection	32A battery fuse (internal)
Wiring connections	Standard connection box with M6 studs.

ENCLOSURE

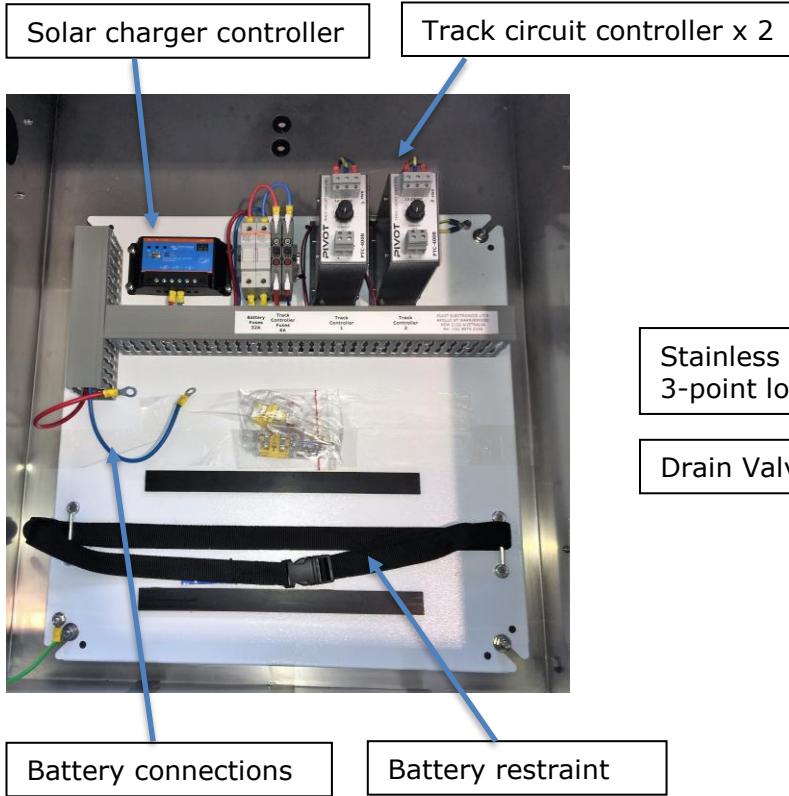
Location Category	Outdoor
Enclosure rating	IP55
Enclosure Material	Stainless steel or Aluminum
Enclosure rating	IP55
Method of mounting	Pole-mounted on 4m steel pole with vandal-proof fasteners.
Enclosure dimensions	60 x 30 x 80 cm (W x D X H) external
Enclosure weight (less cells)	16kg

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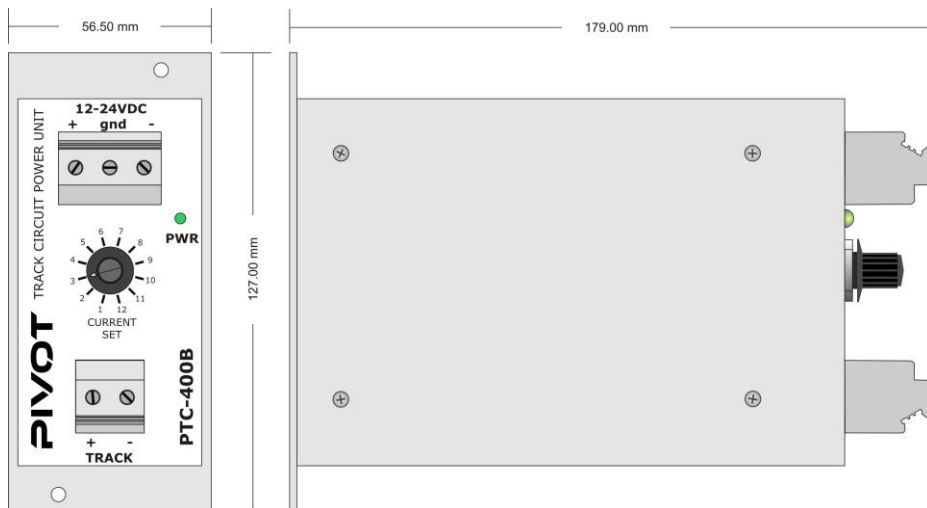
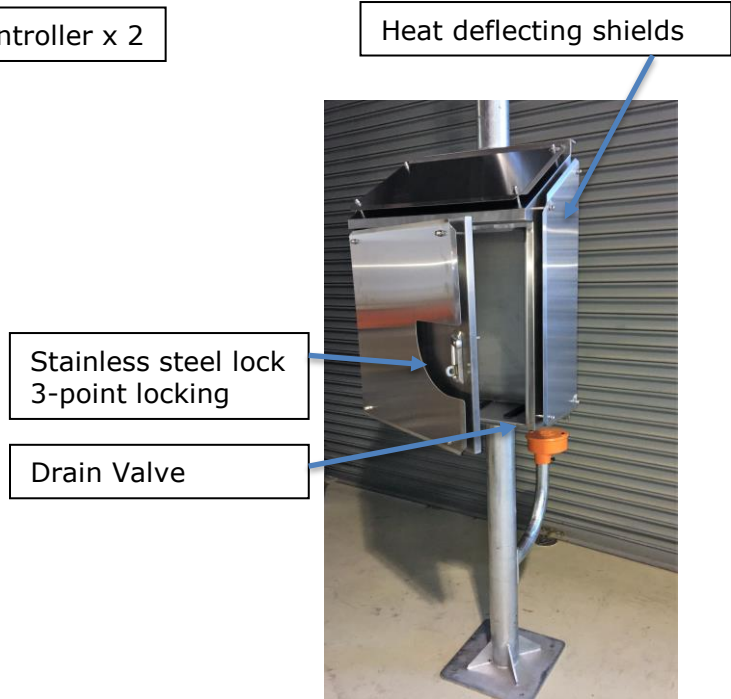
SOLAR TRACK CIRCUIT UNIT



Enclosure Internal



Enclosure



PTC-400B controller dimensions