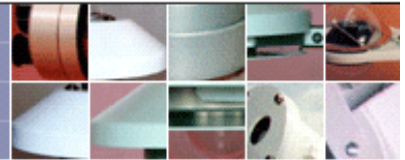




MIDDLETON SOLAR
16 WILSON AVENUE BRUNSWICK VICTORIA 3056 AUSTRALIA



PST-01 PASSIVE SOLAR TRACKER

Equatorial Type Sun Tracker for Solar Instruments



The Middleton Solar PST-01 Passive Solar Tracker is a basic equatorial mount designed to aim pyrheliometers and sunphotometers continuously at the sun throughout the day¹.

Performance Specification

tracking accuracy	< $\pm 0.1^\circ$ per day
rotation	continuous, 1 revolution per 24 hours
torque	2Nm

UNCOMPLICATED, COMPACT, ACCURATE, AFFORDABLE

Easy to setup for any geographic location (align parallel to the axis of rotation of the Earth).

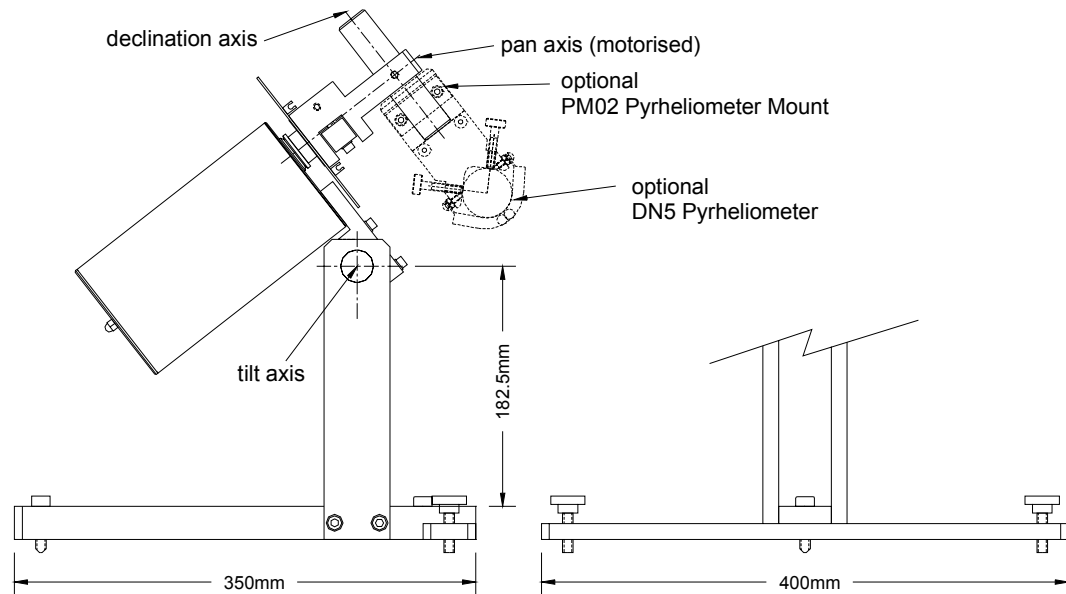
Weatherproof aluminium and stainless steel construction.

Simple to adjust for daily declination variation.

Intrinsically safe, 12 volt DC operation.

¹ Photo shows PST-01 fitted with optional DN5 Pyrheliometer and optional PM02 Pyrheliometer Mount

Middleton Solar PST-01 Passive Solar Tracker Detailed Specification



Torque capacity sufficient to drive one (unbalanced) or two (balanced) instruments
Declination axle is double-ended to accommodate two instruments independently
Precision oscillator circuit to control stepping motor frequency
Frequency stability is superior to 50/60Hz synchronous motor
Drag brake on pan axle to control backlash
Minimal operator attendance required
No routine maintenance necessary
User's Guide included

General Specification

type	1-axis, equatorial solar tracker
gear mechanism	precision reversible spur-geartrain
drive motor	stepping motor, unipolar, 12V
motor frequency stability	±0.1% (typ. for 20°C change)
operating temperature	-30°C to +60°C
operating latitude	-90° to +90°
power requirement	12VDC ±10%, 5W max.
construction	aluminium, hard anodized; stainless steel
axle size (pan & declination)	Ø25mm
IP rating	sealed to IP 64
lead	6m, 4-core
size	see illustration
weight	5kg
shipping size & weight	570 x 390 x 150mm, 7.5kg

options & accessories	DN5 & DN5-E Pyrheliometer
	PM02 Pyrheliometer Mount
	SP02 Sunphotometer ²

² SP02 Sunphotometer fits directly to declination axle