

Technical Characteristics OPM-1

GENERAL

Mount Type:	Dual-axis motorized polar mount. Fully counter balanced.
Mount Material:	Stainless steel.
Antenna:	Any 1.2m offset antenna, Ku- or Ka-band, typically 22° ($\pm 5^\circ$) offset
Fixing:	NP-mount or concrete base with mast of 70-100 mm diameter.
Electronics:	Self contained outdoor enclosure fixed on mast.

FUNCTIONALITY

Azimuth Pointing (in-field selectable):	-80° / +20° -50° / +50° -20° / +80°
Inclined Tracking:	Instantaneous for all satellites in field-of-view up to at least 12° inclination.
Pointing Error:	Typically better than $\pm 0.2^\circ$ under all conditions.
Deployment Area:	Anywhere within $\pm 80^\circ$ latitude.
Power Recovery:	Fully automatic, warm start 20 sec, cold start approx. 3min In most cases a warm start will be made. Only if the power failure occurred when one of the motors was moving, a cold start will be made.

ACTUATORS

Type:	Trapezoidal lead screw, brakeless.
Motors:	24VDC maximum 100W.
Linear Speed:	Nominally 5 mm/s, reduced by control electronics.
Linear Force:	Typically 3000N.
Protection Class:	IP-55 re-enforced.

OUTDOOR CONTROLLER

Enclosure:	Fixed on mast, naturally ventilated, emergency stop, IP-55.
Board:	NG1, new generation Flashlite186 based.
Interface:	On-board IP-RJ45.
Real-time Clock:	Accuracy better than ± 1 sec over lifetime (GPS controlled).
Supply voltage:	85-230VAC (autoranging), 50-60 Hz.
Power:	100W when in motion. 20W when stationary.