



Arkonia Systems Limited

ARK7809 Antenna Rotator



- ▲ Heavy Duty 1400Kg
- ▲ Wind Loading 7.5 square meters
- ▲ 3000Nm Torque
- ▲ 360° Rotation, 2mins nominal
- ▲ Remote RS232C Control

The ARK7809 is a heavy-duty azimuthal antenna rotator, designed specifically for use with the largest antennas in the ARK7550 Series.

Control is through a 19-inch rack mounted motor controller, which provides both manual and computer interface and a digital bearing readout.

The simple construction with few moving parts minimises maintenance costs.

The RF cable feed allows 440° rotation in any one direction.

System Description

The ARK7809 consists of a triangular tower section, approximately 1.2m in height and with faces of 450mm. The motor is connected to the rotating shaft which in turn is supported by two heavy duty bearings positioned in the middle and upper sections of the tower.

The Controller is housed in a 3U (133mm) high standard 1.9 unit rack mounted chassis. The connections to the unit are available at the rear of the chassis.

The bending moments imposed by the antenna and mast are taken by a steel tower section and the drive from the 190-watt motor is worm geared with no belts or chains.

The rugged simple construction allows the rotator to easily withstand the enormous loads imposed by the ARK7554 and similar antennas by 150 Kph windspeeds in the presence of at least 1 cm of radial ice.

A torque wrench and suitable socket is all that is required for system assembly.



System Controller

Typical System Specification Electrical

Wind Load Area	:	2.75 sqm
Total vertical load	:	1400kg
Delivered torque	:	3000Nm
Withstand torque	:	5000Nm
Drive motor power	:	190W
360° Rotation Time	:	120 Seconds Nominal
Readout positional accuracy	:	± 0.5°
Total limit to limit travel	:	380°
Remote Control	:	RS232
Operating temperature range	:	-20°C to +50°C
Turntable diameter	:	400mm
Power supply requirement	:	115/220Vac
Net weight	:	225kg nominal

FOR FURTHER TECHNICAL INFORMATION REQUEST: PRODUCT SPECIFICATION



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