DOUBLE-AXIS SCANNING PLATFORM

Areas of Application

The double-axis scanning platform is designed for mounting antennas, radars, and other equipment, which require controlling the transmitting/receiving direction of RF signals

Specification

Max. weight of installed	
equipment, kg	100
Nominal angular momentum along	
the azimuth and elevation axes, Nm	100
Max. scanning rate, °/s	90
Max. elevation acceleration, °/s²	200
Max. backlash in azimuth	
and elevation:	≤0.1°
Azimuth scanning range	$N \times 360^{\circ}$
Elevation scanning range	-10°+90°

Advantages

The platform enables continuous circular azimuth scanning; the elevation scanning range is from –10° up to +90°; the platform is operable in severe climatic conditions; compliance with MIL-STD-810G can be provided optionally; embedded controller enables remote user control via various interfaces and is integrable with the equipment installed using standard physical layer interfaces; control data rate reaches 1Gb/s

IPR Protection

IPR1



Stage of Development. Suggestions for Commercialization

IRL8, TRL7 Manufacture, delivery, warranty service, and staff training, upon request

Contact Information

Dmytro M. Vavriv, Institute of Radio Astronomy of the NAS of Ukraine; +38 057 720 37 18, e-mail: vavriv@rian.kharkov.ua