

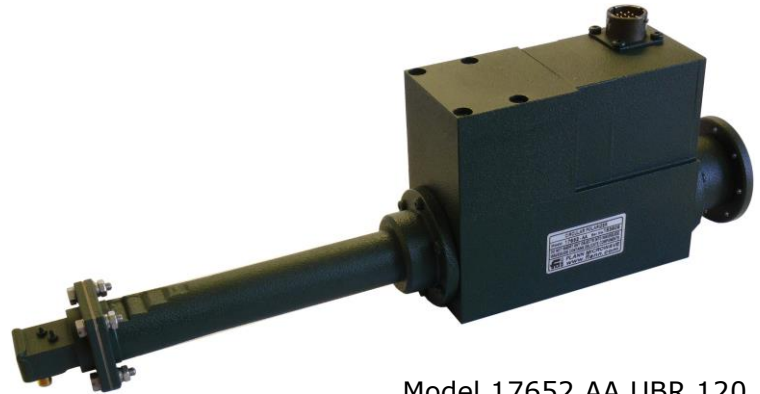


### Features

- Models cover 5.38 to 112 GHz
- Full Waveguide Band
- TTL Driven

### Applications

- Suitable for conversion between linear and circular polarisation for transmission and reception via a horn antenna.

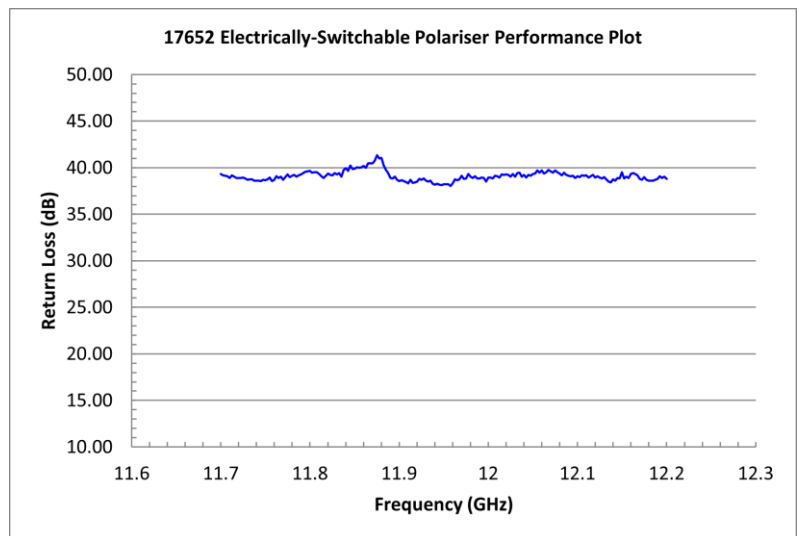


Model 17652 AA UBR 120

The electrically-switchable polariser is an instrument able to produce right-hand or left-hand circular polarisation from a linearly-polarised output. Conversion between linear and circular polarisation is accomplished with a dielectric vane, which is driven by an electric motor through 90 degrees to switch between right-hand and left-hand circularity. The motor is controlled via a TTL-level (5V) interface which also provides status monitoring.

### Specifications

Each polariser will work over a full waveguide band but can be optimised for best performance (axial ratio) in a specific frequency range. Axial ratio, insertion loss and return loss are dependent on operating band. Standard rectangular waveguide at port 1, circular waveguide at port 2, can be used to convert either way. Requires DC supply of +15 to +32 V.





Model	Waveguide			Frequency Band (GHz)	VSWR	Isolation
	WG	R	WR			
17652	17	120	75	9.84 – 15.0	1.05	TBA
18652	18	140	62	12.2 – 12.7		30dB
27652	27	900	10	73.8 – 112	1.25	TBA

**Related Products**

- Series 648: Dielectric Polariser
- Series 650: Manually-Switchable Dielectric Polariser
- Series 651: Corrugated Polariser

**Relevant Supporting Products**

243, 810, 820, 880: Horn antenna

**Custom Design**

Custom built instruments can be supplied; please contact the sales team for more information.  
[sales@flann.com](mailto:sales@flann.com)

**Ordering**

Model	Series	-	Flange
WG14 – WG27	652		See flann.com

**Environmental Specifications**

Optimum operating temperatures: 5 to 35°C