

# Z-Roll Unit

AL-610-1

Z-Roll units provide linear and rotary movement to a probe antenna, typically as part of a planar scanner measurement system.

The Z-Roll is a dual-axes positioning unit allowing for fine adjustments of the AUT probe distance via the Z-axis and the alignment of the polarization of the AUT probe via the roll axis.

Z-axis positioning facilitates planarity correction during antenna measurement. Z-on-the-Fly application software pilots the unit.

The Z-axis of the Z-Roll unit can be used to remove multiple reflections between the probe and the AUT by measuring several near field data planes at  $\lambda/2$  distances between the two.

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## Applications

- Positioning subsystems which require additional axes

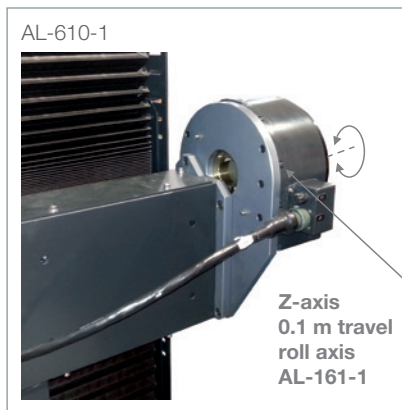
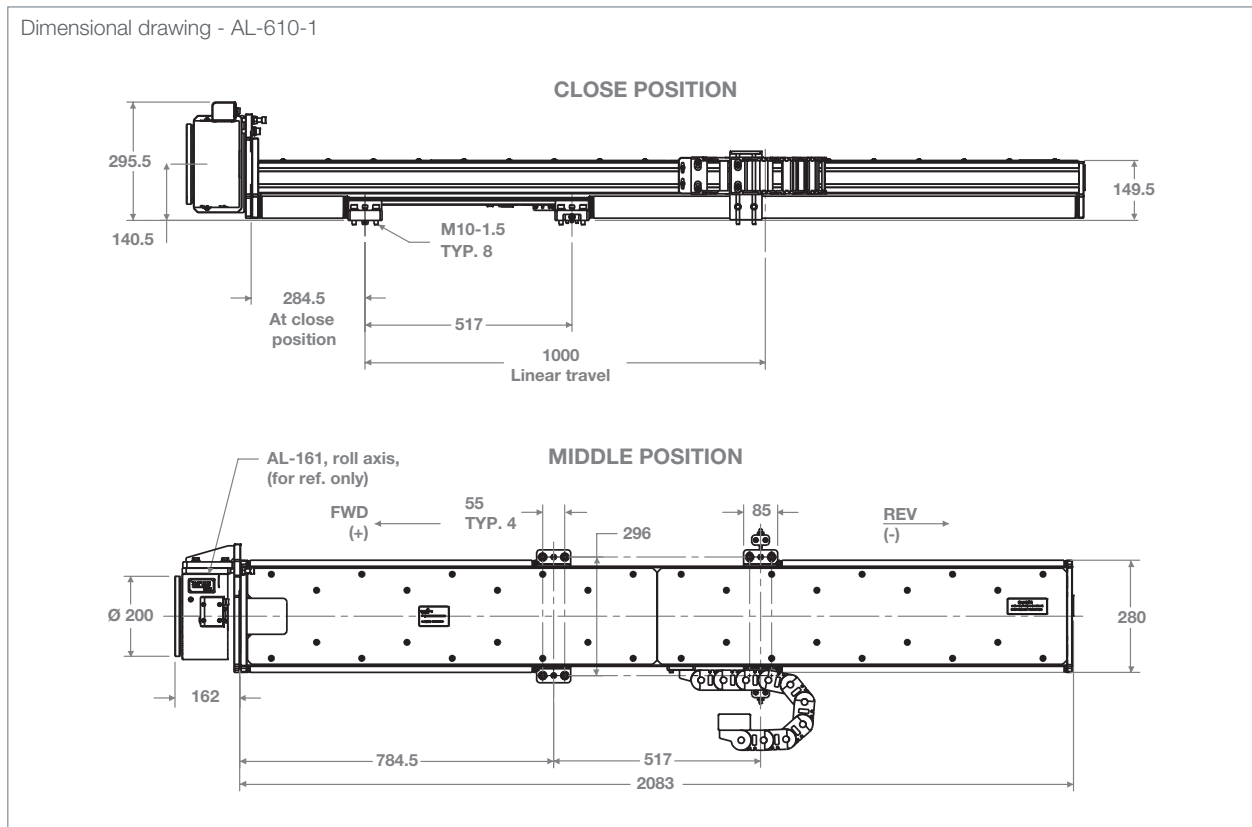
## Product Highlights

- High repeatability
- Travel lengths from 0.1 m - 3 m
- Manual and motorized models
- Low backlash
- High accuracy positioning
- Roll positioners AL-161; AL-360

## Specifications - Z-Roll - Linear/rotary axis for probe - AL-610-1

PARAMETER	POSITIONER MODEL						
	AL-610-1-0.1M	AL-610-1SP-0.25M-5	AL-610-1-0.25M-2	AL-610-1-0.6M	AL-610-1-1M	AL-610-1SP-2M	AL-610-1SP-3M
Dimensional Drawing Number	DCD215-0070	DCD13-2864-8	DCD13-2864-3	DCD212-0342-7	DCD212-0342-9	DCD214-0175	DCD211-0330-2
Travel Range (mm)	100	250	250	600	1000	2000	3000
Speed (mm/sec)	25	-	25	25	25	12	12
Motorized/manual	Motorized	Manual	Motorized	Motorized	Motorized	Motorized	Motorized
Data Take Off	Linear Encoder	Manual Ruller	Linear Encoder	Linear Encoder	Linear Encoder	Rotary Encoder	Rotary Encoder
Z-axis Slide Accuracy	0.05 mm RMS	Manual	0.05 mm RMS	0.05 mm RMS	0.05 mm RMS	0.2 mm RMS	0.2 mm RMS
Z-axis Slide Repeatability	0.02	-	0.02	0.02	0.05	0.05	0.05

Dimensional drawing - AL-610-1



### Supplied Accessories

#### Digital Documentation Set

User Manual (Installation, Setup, Operation & Maintenance)

#### Technical Notes

**1** Optional Z-on the Fly software - an add-on package for MIDAS software



Contact your local sales representative for more information  
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[www.mvg-world.com/positioners](http://www.mvg-world.com/positioners)