

# FOD Radar Technical Specifications



## SPECIFICATIONS

### FOD FMCW-76/600/100

Operating Frequency	76.5 GHz
Operating Range	50 to 1000 m (50-1200 m optional)
Range Resolution	0.30 m
Minimum Target RCS	-14.4 dBsm for reference cylinder (ø38 x 31 mm)
Operation mode	FMCW
Field of View	200°
Max. tilt rotation	±5°
Angle resolution Azimuth / Elevation	0.1°/ 0.1°
Update Rate (Rotation Speed)	Pan: 24 deg/s, Tilt: 12 deg/s
Runway Complete Scan Trajectory	2 times 160 degrees azimuth with an altitude shift of 0.4 degrees for 3 minutes
Data Connection	Gigabit Ethernet (RJ-45 connector)
Data transfer rate	Position of radar + FFT, 4096 points@16 bits or raw digital data 8192 points @14bits
Power Consumption	500 Watts
Power Supply	54 V DC, optionally 110/230V AC
Weight	80 Kg
Mounting Height	8 m (recommended)
Safe Working Distance (from radome)	1 m
Operating Temperature	-30°C to + 60°C

<b>Relative humidity at 25°C and lower, max</b>	95%
<b>Atmospheric pressure</b>	84.0 to 106.7 kPa (630 to 800 Torr)
<b>Max Antenna Wind Load</b>	150 km/h or 0.3 kN
<b>Environmental</b>	IP 67

<b>Compliance</b>	CE Marked
<b>EMC Directive</b>	2014/30/EU
<b>Low Voltage Directive</b>	2014/35/EU
<b>Radio Equipment Directive</b>	2014/53/EU

Product web page: <https://elva-1.com/products/a40155>