

Ranger 1800

The Ranger family of terminals seamlessly integrate with multiple satellite constellations, granting you global reach and unwavering resilience, no matter the mission. Our advanced ground systems simplify training, streamline logistics, and optimize costs, keeping your operations running smoothly.

Unmatched Performance

Ranger terminals boast the industry-leading EIRP signal strength, delivering reliable communication even in the most remote locations. Their exceptional reliability is world-renowned, giving you the confidence to focus on your mission, not your equipment.

Revolutionary Modularity

Swap bands in seconds with our modular feed boom system design, saving time, space and cost. Choose from multiple antenna sizes for ultimate adaptability, ensuring you're always equipped for success.

Built to Endure, Designed for Mobility

Crafted with lightweight, durable components, the Ranger 1800 prioritizes both portability and longevity. Its carbon fiber composite reflector and integrated fasteners withstand even the harshest environments, so you can focus on the mission, not the equipment.



Mission-Ready in Minutes

Deploy the Ranger 1800 in minutes and focus on what matters most. Its over 75% interchangeable components allow for rapid customization to fit your specific needs.

Simplified Operations

Standardized systems simplify setup, maintenance, and training across the Ranger Family. Shared interfaces ensure intuitive operation. Customizable packaging optimizes deployment for diverse scenarios. Choose one-button motorized deployment for speed, or manual paired with our pointing assistant for unwavering reliability and best in class Mean Time Between Failure (MTBF). Conquer any mission with the perfect Ranger customizable solution.

World-Class Sustainability and Support

Airbus offers standard 12 month and optional 3 or 5 year extended hardware warranties, 24 x 7 phone support and sustainment.

Ranger 1800 Technical Specifications

	X Band (100W /400WSSPB)		Ku Band (40W SSPB)		Ka Band (25W/50W SSPB)		C Band (Linear)(50W SSPB)	
	RX	TX	RX	TX	RX	TX	RX	TX
Frequency (GHz)	7.25 - 7.75	7.9 - 8.4	10.70 - 12.75	13.75 - 14.5	19.2 - 21.2	29.0 - 31.0	3.40 - 4.20	5.85 - 6.725
EIRP (°LIN) (dBW)	-	58.2/64.7	-	61.3	-	64.2/67.2	-	56.6
EIRP (°SAT) (dBW)	-	61.2/67.7	-	64.3	-	67.2/70.2	-	59.6
Tx Gain (Mid Band, dBi)	-	41.9	-	47.1	-	52.7	-	39.7
Rx Gain (Mid band, dBi)	41.2	-	45.0	-	50.1	-	35.4	-
Antenna Noise Temp. 20° EI (°K)	64.0	-	48.0	-	125.0	-	43.0	-
G/T @20° (dB/K)	20.3	-	24.7	-	26.0	-	16.0	-
Crosspol (dB)	-35.3	-37.1	-35.0	-35.0	-30.9	-27.4	-30.0	-30.0
Axial Ratio (dB)	0.3	0.2	-	-	0.5	0.6	-	-
Isolation	-	-	-	-	-	-	-	-
TX/RX (dB)	-110	0 dBm Input	-85	0 dBm Input	-85	0 dBm Input	-85	0 dBm Input
RX/TX (dB)	0 dBm Input	-110	0 dBm Input	-30	0 dBm Input	-30	0 dBm Input	-35
Sidelobe Compliance	Mil STD 188-164C / ITU580		FCC / ITU 580 / IESS 207		Mil STD 188-164C / ITU580		FCC / ITU 580 / IESS 207	

*Typical RF Configuration - Various BUC sizes and options available for C and KU. **Ranger 1800 is configurable with up to 400W X and 50W Ka BUCs.

*** C-Band Circular available upon request.

Mechanical, Environmental, and Electrical Specifications

Antenna type	1.8 meters (70.87 in) Carbon Fiber
Reflector Configuration	Parabolic Single Offset, 0.8 F/D (7 pieces)
Modem	Modem Agnostic / L-band Interface
Power	90 – 240VAC 50-60Hz
Elevation Range / Accuracy	5 to +90 degrees / 0.2 degrees
Azimuth Range / Accuracy	+/- 180 degrees / 0.2 degrees
Polarizations Range / Accuracy	+/- 90 degrees / 0.2 degrees
Satellite Acquisition	Pointing assistant for non-motorized systems. Auto acquire and Tracking for motorized systems.
Wind Loading (Operational)	30 mph (26 Knots) gusting to 45 mph (39 Knots)
Wind Loading (Survival)	60 mph (52 Knots) remove reflector and use tie-downs
Solar Radiation	1135 W/m2
Ambient Temperature (Operational)	-30 to 60°C (-22 - 140°F) External equipment
Ambient Temperature (Storage)	-40 to 70°C (-40 - 158°F) External equipment
Operating Humidity	0-100%
Rainfall Maximum (excluding link budget effects)	4 in/h (10 cm/h) Operational 6 in/h (15 cm/h) Survival
Solar Radiation	360 btu/h/ft2 (1000 Kcal/h/m2)
Ice and Snow	½" radial ice, removed by hand
Altitude (Operational)	3000 Meters
Certified Configurations	WGS, DSCS, SKYNET

*Typical Operating Conditions

Antenna/Feed Weights and Dimensions

Case	Description	(LBS)	(KG)	(IN)	(mm)
1	Pedestal/Tablet	74	34	32 x 21 x 16	813 x 533 x 406
2	Legs/Backbeam/Feet/Tiller Arm	112	51	45 x 25 x 17	1143 x 635 x 432
3	Reflector Panels 1,5,7 & Anchor Kit	88	40	39 x 36 x 12	991 x 914 x 305
4	Reflector Panels 2,3,4 & 6	84	38	39 x 36 x 12	991 x 914 x 305
5	40W Ku Linear Feed	54	25	45 x 16 x 13	1143 x 406 x 330

