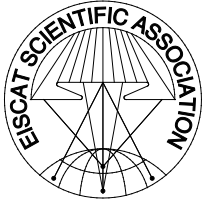


Technical specifications

This is a compilation of the basic technical specifications of the EISCAT facilities.

Location	Tromsø		Kiruna	Sodankylä	Longyearbyen	Tromsø Heater
Band	VHF	UHF	VHF	VHF	UHF	HF
Transmitter frequencies	222.8 - 225.4 MHz	926.6 - 930.5 MHz	-	-	498.0 - 502.0 MHz	3.85 - 8.00 MHz
Transmitter	1 klystron	2 klystrons	-	-	16 klystrons	12 linear class AB tetrode valves
Peak power	1.6 MW	2 MW	-	-	1 MW	12x100 kW
Average power	200 kW	250 kW	-	-	250 kW	12x100 kW
Pulse duration	1 μ s - 2.0 ms	1 μ s - 2.0 ms	-	-	0.5 μ s - 2.0 ms	> 20 μ s
Minimum interpulse	1.0 ms	1.0 ms	-	-	0.1 ms	20 μ s
Phase coding	Binary	Binary	-	-	Binary	-
Receiver frequencies	214.3-234.7 MHz	921.0-933.5 MHz	224.0-230.5 MHz	224.0-230.5 MHz	485.0-515.0 MHz	-
Receiver	Analog	Analog	Analog	Analog	Analog	-
System temperature	250-350 K	90-110 K	100 K	100 K	65-80 K	-
Digital processing	14-bit 15 MHz ADC, digital conversion to baseband, 32-bit complex integer					-
Baseband channels	6	6	6	6	2 \times 6	-



Location	Tromsø		Kiruna	Sodankylä	Longyearbyen	Tromsø Heater
Antenna	Four 30×40 m steerable parabolic cylinders	32 m steerable parabolic dish	32 m steerable parabolic dish	32 m steerable parabolic dish	42 m fixed and 32 m steerable parabolic dishes	Three arrays of dipole antennas
Feed system	Line feed, 128 crossed dipoles	Cassegrain	Crossed dipole	Crossed dipole	Cassegrain	-
Gain	46 dBi	48.1 dBi	48.1 dBi or 50 dBi	48.1 dBi or 50 dBi	44.8 dBi or 42.5 dBi	24 dBi or 30 dBi
Polarisation	Circular	Circular	Any	Any	Circular	