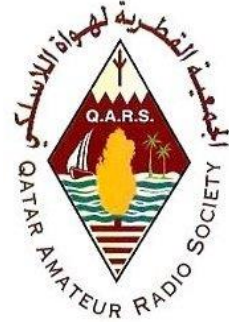




## AMSAT P4-A

First geostationary amateur  
 radio transponder  
 (incl. DATV) on  
*Es'hail-2*



**Launch:** Q4 2018 – **Position:** 26 deg East – **Lifetime:** 15+ years

Frequencies narrow band (**NB**) transponder (bandwidth 250 kHz):

	lower end	upper end	polarisation
Uplink	2400.050 MHz	2400.300 MHz	RHCP
Downlink	10489.550 MHz	10489.800 MHz	vertical

Frequencies wide band (**WB**) transponder (bandwidth 8 MHz):

	lower end	upper end	polarisation
Uplink	2401.500 MHz	2409.500 MHz	RHCP
Downlink	10491.000 MHz	10499.000 MHz	horizontal

Minimum setup for **SSB** communications:

RX Antenna	60-90 cm SAT-TV dish
Receiver	LNB with power injector and DVB-T dongle + SDR software (for example SDR#)  OR  3 cm LNA with downconverter to 70cm
Transmitter	10W PEP in 60-90 cm dish plus upconverter from 144 MHz

Minimum setup for **DATV** (DVB-S2) communications:

RX Antenna	60-90 cm SAT-TV dish
Receiver	modified LNB with standard satellite receiver box (DVB-S2)  OR  modified LNB with PCI DVB-S2 cards for PC use
Transmitter	25W PEP in 2.4m dish plus DVB-S2 modulator for a 2MSym/s videostream

Coverage from orbital position of 26 deg East

