

Es'hail 2 / QO-100

Dual Band Dish Feed Uplink & Downlink

P/N: LH-24ESH

This Dual Band Dish feed is designed to use with a Prime Focus parabolic Dish. RF HAMDESIGN can offer you several Prime Focus Mesh dishes, a 1 meter or 1.2 meter diameter Prime Focus mesh dish would be a perfect combination by use of this Dual Band Es'hail 2 Dish feed.

The Dual Band Dish feed generate a LHCP & Linear signal and is tuned to Es'hail-2 Download and Uplink Narrowband and Wideband Linear transponder and supplied incl. measurement plot of our Network analyzer to 2.4GHz and 10.4GHz
2.4GHz Uplink (Left Hand Circular Polarization will result in RHCP when placed in front of a reflector (Dish)
(As option available a RHCP Dish feed, please email us)

Es'hail-2 carries two "Phase 4" amateur radio transponders operating in the 2400 MHz and 10450 MHz bands. A 250 kHz bandwidth linear transponder intended for conventional analogue operations and an 8 MHz bandwidth transponder for experimental digital modulation schemes and DVB amateur television. To operate on both transponders you have to rotate the dish feed 90 degree (refer picture)
In this case the Downlink band has 2 options: Horizontal polarization for Narrowband and Vertical polarization for Wideband digital transponder.

Specifications LH-24ESH	
2.4GHz LHCP Polarization:	Uplink
10.4 GHz Linear Polarization:	Downlink **
Prime Focus Dish Feed:	F/D 0.40...0.45
Connector 2.4GHz:	N-Conn Female
Connector 10.4GHz:	SMA Conn Female
50 ohm	
Return loss:	Both bands >25dB
Dimensions round:	D=160mm / L=50mm
Weight:	0.47 Kg
RF Power 2.4GHz:	150W CW
Waterproof	IP-53

** Note: Narrow Band = Vertical polarization and Wide Band = Horizontal polarization. (Dish feed must be rotated 90 degree)

Available Options:	
CLX-1	Bracket to mount dish feed in front of dish
BR-50	Fixed Elevation Bracket

Es-Hail 2 / Q-100 "Phase 4" amateur radio transponders	
Wideband digital transponder	2401.500 - 2409.500 MHz Uplink = RHCP 10491.000 - 10499.000 MHz Downlink = Horizontal
Narrowband Linear transponder	2400.050 - 2400.300 MHz Uplink = RHCP 10489.550 - 10489.800 MHz Downlink = Vertical

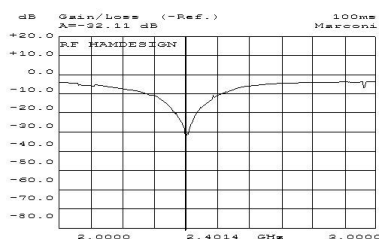


1M2 RF HAMDESIGN DISH & Dual Band Es-Hail 2 Dish feed

On Picture: 1M2 Dish + 2.8mm mesh
Es-Hail 2 Dual Band Dish feed
CLX-1, dish feed bracket
BR-50, Fixed Elevation Bracket

2.4GHz Uplink measurement plot
in Return Loss (dB)

RF HAMDESIGN B.V.
Dual Band Es'hail 2 / QO-100 Dish Feed
LHCP Uplink 2400 MHz
Measurement Plot: A=Return Loss



10.4GHz Downlink measurement plot
in Return Loss (dB)

RF HAMDESIGN B.V.
Dual Band Es'hail 2 / QO-100 Dish Feed
Linear Downlink 10.4 - 10.5 GHz
Measurement Plot: A=Return Loss

