

## Y-Haul

nLOS compact VHF radio

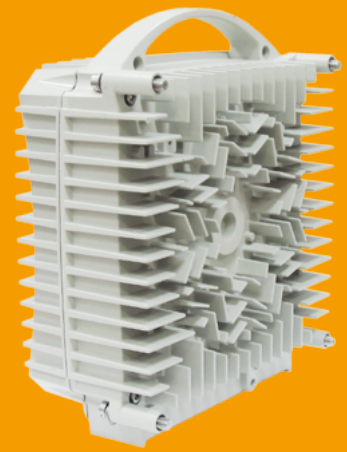
### FEATURES

- Frequency range: 300–700 MHz
- QPSK to 64QAM for longer hops and/or increased capacity
- Different channel bandwidth: 1.75–12 MHz
- Fast Ethernet for Y-Haul TDD and Fast Ethernet plus E1 for Y-Haul FDD Interfaces available

### PRODUCT OVERVIEW

The Y-Haul is a new generation of UHF/VHF point-to-point wireless communication system. It provides TDM and Ethernet data transmitting over incredible long-range distances, supporting up to 29 Mbps of aggregate data traffic. Y-Haul operates over long hops even in nLOS conditions. Compared with dish antennas, Y-Haul's antennas are very light weight and have almost no wind load.

There are two modes available: FDD and TDD. Y-Haul FDD can transport any mix of E1 and Ethernet, while Y-Haul TDD is pure Ethernet. Y-Haul FDD can be configured for 1+0 nonprotected, 2+0 non-protected, 1+1 protected and 1+1 (for critical) / 2+0 (for best effort) modes.



up to **30** Mbps

**-50...+50** °C

**nLOS**  
operation over long hops

## SPECIFICATIONS

Operation mode	FDD (Full duplex)	TDD (Aggregated)				
	Point to Point	Point to Point and Point to Multi Point (16 CPE)				
Frequency band, MHz	390...410 / 434...450	310...360 or 430...480				
		Tx power, dBm				
BPSK	—	33				
QPSK	35	32				
16QAM	33	30				
32QAM	32	—				
64QAM	31	30				
Supported bandwidth, MHz	1.86	1.5	3	6	12	
		Sensitivity, dBm				
BPSK	—	-98	-95	-92	-89	
QPSK	-95	-95	-92	-89	-86	
16QAM	-89	-89	-86	-83	-80	
32QAM	-84	—	—	—	—	
64QAM	-81	-83	-80	-77	-74	
		Radio channel capacity, Mbps				
	FDD	TDD				
BPSK		0.6	1.2	2.4	4.8	
QPSK	2.4	1.2	2.4	4.8	7.2	
16QAM	4.8	2.4	4.8	7.2	14.2	
32QAM	7.2	—	—	—	—	
64QAM	8.8	3.6	7.2	14.2	29	
Traffic interfaces	2xFast Ethernet, 4xE1	1xFast Ethernet				
Network Management		NMS "Master M"				
		NP (native protocol) / USB, Ethernet				
Power type	Dedicated cable	PoE				
Design	Split (ODU+IDU)	Full ODU				
Operating Temperature		-50 ...+50 °C				
Power Consumption	<60 W	50 W				
Power Supply Voltage	-39...-72 V	~220 V AC, -48/-60 V DC				
Dimensions / Weight	ODU: 245×295×120 mm / 10 kg; IDU: 485×240×46 mm / <5 kg	371×264×123 mm / <9 kg				