

40dBm 400MHz TETRA/DMR/P25 Fiber Optic DAS High Power Remote Unit (RU)

Model No: FRU-400-40W55



Features

- Designed to support Public and Mission Critical Services at 400MHz bands
DMR/LMR/Tetra network coverage using advanced F.O. technology
- Fully comply with DMR and APCO25 standards
- Expands signal coverage and fill the signal blind area where signals are weak or unavailable in
Tunnels, Airports, Railway stations, enterprises, etc.
- The systems include a Master Unit (M.U.) and multiple Fiber Remote Units (FRU)
- Customized Design for DMR/LMR Suitable for large-scale Indoor Installations
- Low Optical Transmission Loss, very stable and improved signal transmission quality
- One Master Unit can support 4 or 8 Remote Units (R.U.)
- RJ45 port links a notebook for local supervision or the built-in wireless modem for NMS
(Network Management System) monitoring & controlling equipment parameter
- Backup Battery for 2 hours of operation via external 24-volt battery

Introduction

The EMTS Telecom Services Fiber Optic system is built from two main components: M.U. (Master Unit) and R.U. (Remote Unit). EMTS provides high-end R.F. coverage solutions and components to ensure your fiber DAS system's high performance. The Master Unit (M.U.) converts the BTS RF signals from R.F. to optical signals using optical cables it provides a fiber interface. The remote fiber unit (R.U.)reconverts the optical input signal to R.F. and feeds it to the antennas. It is designed for modularity and high performance, acting as the end unit in the system and connecting directly to the antenna system. The R.U. includes amplification modules in multiple output levels and various combinations of various frequency bands, filtering modules, optical to, R.F. ,and R.F. to Optical converters. It provides USB or WIFI connectivity for local settings and a wireless modem for remote control and alarm monitoring in the M.U. The EMTS Telecom Services advanced fiber optic repeating system is a cost-effective and practical solution for extending signal coverage in subways, tunnels ,and other Indoor or outdoor distribution systems.



EMTS Telecom Services offers a comprehensive portfolio of enhanced coverage solutions for Wireless Networks, Based on advanced technologies. EMTS-proven indoor and outdoor solutions solve various network challenges, including interference and oscillation problems, challenging coverage holes, rapid response deployment, and inadequate in-building coverage. Regardless of the technology or frequency, EMTS can provide customized coverage solutions that address any combination of unique and complex network needs for Wireless Networks.

Technical Specifications

		Uplink	Downlink
Frequency (MHz) (Other customized bands are possible)		380-385	390-395
		385-390	395-400
		410-415	420-425
		415-420	425-430
		450-455	460-465
		455-460	465-470
Bandwidth		Any bandwidth of 1MHz and up with at least 3MHz separation between UL and DL	
Transmission Distance		≤ 10Km	
Max. Input Level		+10dBm	
Composite Downlink Output Power		40±2dBm	
Optical Output Power		0±3dBm (1310nm) / -6±3dBm (1550nm)	
System Gain		45±3dB	
Gain Adjustment Range		1 to 25 dB @ Step of 1 dB	
Spurious Emission (Out of Band)		≤ -36dBm@9KHz-1GHz	
		≤ -30dBm@1GHz-12.75GHz	
Noise Figure		≤ 5dB	
Group Delay		≤ 5μSec	
VSWR		≤ 1.5:1	
Optical Receiver Sensitivity		≤ -15dBm	
Connector	R.F. Connector	1x N Female	
	Optical Connector	1X LC/UPC	
Operating Temperature Range		- 25°C to + 55°C	
Relative Humidity Range		≤ 95% (non-condensing)	
Power Supply		AC 220V (50-60Hz) External Backup battery 24v input	
Power consumption		130 Watt	
Dimensions		447 x 357 x 203mm	
Weight		≤20kg	
Application		Outdoor(IP65)	
Monitoring and Control		USB (for local settings)	
Comply with Standards			
Safety		EN60950-1, EN 50385	
EMC		EN 301 489-1, EN 301 489	
Radio		EN 302 561	
TETRA (DMR)		ETSI TS 101 789-1 and EN 303 035-1 and EN 300 394-1	
CE		Comply	

About EMTS Telecom Services Ltd.:

EMTS is a leading supplier of high-quality RF coverage solutions designed to maximize wireless network coverage in difficult RF environments and complex settings. The company specializes in extending RF radio coverage to rural areas, office buildings, subways, tunnels, and shadowed areas. The EMTS coverage solution supports all major mobile technologies and wireless networks' standards.

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