EMTS
Telecom Services
TURNING TECHNOLOGY INTO SOLUTIONS

UHF/LMR/ PMR 400MHz
High Performances
Fiber Optic Repeating System

Model No: FOR-FBDA-400-33/37/40/43W60

Features:

- **Fiber Optic RF Repeater is a reliable solution to extend and improve the coverage area of UHF/LMR/PMR Networks, consists of two main modules, Master and multiple Slave units**
- **Supports all combinations of UHF/LMR/PMR 400MHz bands**
- **33, 37, 40 or 43dBm composite power, meets LMR/PMR system standards**
- **Easy field installation and maintenance reduces rollout and operational costs**
- **The signal transmission in fiber optic repeater is not disturbed by outside influences**
- **Provide quick RF coverage service to your LMR/PMR Base-Station**
- **Compact Size and High Performance in waterproof enclosure suitable for both outdoor and indoor installations**
- **Remote unit design for wall mount & Base unit design for 19 inch rack**

Introduction

The EMTS Telecom Services Ltd. Fiber Optic Repeating system is the best and more reliable solution to extend and improve the coverage area of LMR 400MHz (TETRA, APCO-25 or Analog systems) telecommunication systems. The Fiber Optic Repeating system consists of two modules, Master and Slave. The Master module can be used directly coupled from BTS or can be connected to a RF Repeater receiving signals from the BTS, while the Slave (Remote) module provides coverage in the service area. Fiber Optic Repeaters amplifies in directions, uplink and downlink a continuous bandwidth, factory tuned. Its rugged construction and easy field maintenance reduces operational costs and ensures a high MTBF. The EMTS Fiber optic repeating system is a cost-effective and practical solution for extending signal coverage in subways, tunnels and Indoor or outdoor distribution systems.

EMTS Telecom Services offers a comprehensive portfolio of enhanced coverage solutions for the Wireless Networks, Based on advanced technologies. **EMTS** proven, indoor and outdoor solutions solve a wide range of 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 the Wireless Networks.

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Technical Specifications

Specifications		Downlink	Uplink
Frequency Range Any partial bandwidth at the LMR 400MHz band (please specify uplink and downlink bands)		380-512 MHz	380-512 MHz
output power types	2W	33dBm	-20~0dBm
	5W	37dBm	-20~0dBm
	10W	40dBm	-20~0dBm
	20W	43dBm	-20~0dBm
Gain control range		≥30dB	
Gain		60 to 65 db	55 to 60 dB
Gain control linearity		±1dB	
ALC		P0≤2dB	
In-band ripple		≤3dB	
Inter-modulation attenuation (In-band)		≤-40 dBc/30KHz	≤-50 dBc/30KHz
Inter-modulation attenuation (out-band)	9kHz ～ 1GHz	≤-36dBm/30KHz	
	1GHz ～ 12.75GHz	≤-30dBm/30KHz	
Spurious		≤-22dBm/100KHz	
Spurious (out-band)	9kHz ～ 150kHz	≤-36dBm/1KHz	
	150kHz ～ 30MHz	≤-36dBm/10KHz	
	30MHz ～ 1GHz	≤-36dBm/100KHz	
	1GHz ～ 12.75GHz	≤-30dBm/1MHz	
	825MHz ～ 835MHz	≤-47dBm/100KHz	
	870MHz ～ 880MHz	≤-47dBm/100KHz	
	1.71GHz～ 1.92GHz	≤-47dBm/100KHz	
	3.4GHz ～ 3.53GHz	≤-47dBm/100KHz	
Out-band rejection	Per frequency band	Offset of working frequency band≥2.5MHz : ≤ -40 dBc or≤-13dBm/30KHz	
		Offset of working frequency band≥10MHz : ≤-60dBc or≤-33dBm/30KHz	
Noise figure		≤5dB	
Propagation delay		≤5μs	
VSWR		≤1.4	
Frequency tolerance		≤±0.05ppm	

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 standards of wireless Networks.

External connection	
RF Connector	N-F / 50 ohms
Fiber Connectors	SAPC
Number of Remote units from the Optical Base Unit	8
Alarm Detection	HPA, LNA, TEMP, PSU
Local Alarm Option; NMS interface	PSU, HPA, LNA, control gain of Uplink and Downlink
Power Supply	110VAC or 220VAC ±15% 50-60Hz Optional -48 VDC
Enclosure	Remote unit design for wall mounting, Base unit design for 19-inch rack. Remote Units case IP65 size 650×400×295 mm
Fiber type included	recommended Single mode, WDM
Wavelengths	1310 and 1550 uM
Environmental	
Operating Temperature Range	-20 to +55 °C
Cooling	Convection
Environmental Sealing	IP65
Operating Humidity	Up to 95% (non-condensing)
Complies with	EN 301 489-18, ETSI TS 101 789-1, EN 60 950
Standards	Locked aluminum wall mount case 650×400×295 mm

Ordering information:

Model No: FOR-FBDA-400-AW60-X-Y
A=Downlink Composite Power can be 33, 37, 40 or 43
X= Uplink band
Y= Downlink band

All specifications subject to change without notice.

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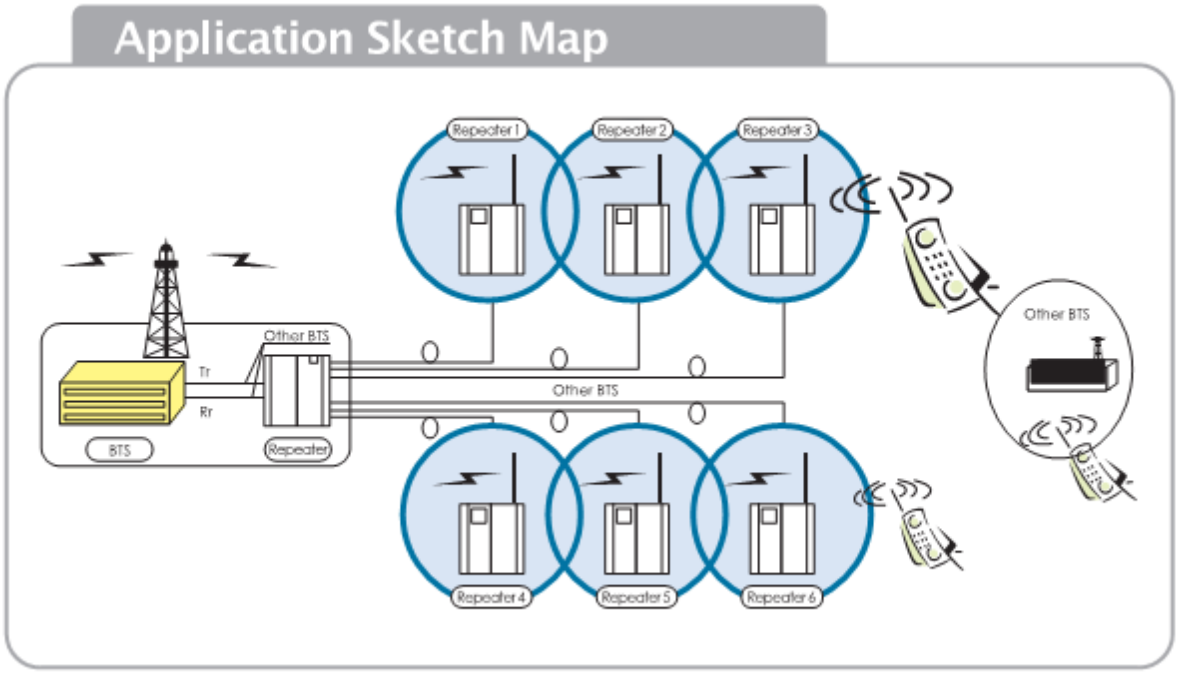

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