



# 4 by 4 Hybrid Matrix

## 698-2700MHz

### 500 Watts Power Handling

Model Number: MTX-4X4-698-2700-500

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#### Main Features:

- Hybrid Type device with low insertion loss
- Supporting all wireless air protocols includes advanced LTE
- Wide frequency range
- High Isolation with min 30dB across the band
- Very Low Passive Intermodulation (PIM)
- Handling Power of 500 watts per port
- Easy installation with DIN connectors
- Exceptional reliability and environmental protection

#### Introduction

The EMTS Telecom Services Ltd. 4 x4 matrix model MTX-4X4-698-2700-500 is a high performance, high power '4 by 4' Hybrid Matrix that use to combine BTS. The usage of high performance hybrid reduces the in band passive inter-modulation products and minimize the interference. Its high isolation level between ports ensures interference-free environment for any technology deployed.

The EMTS innovative hybrid design provides a very low insertion loss while keeping the product extremely compact and lightweight. Its high Return Loss makes the introduction of the device transparent to the BTS. The very high isolation and very low PIM makes the 4x4 matrix also suitable for LTE advanced networks among all other wireless air protocols. The unit is designed to withstand the most severe outdoor environments and can handle up to 500 watts CW per port.



**EMTS Telecom Services Ltd.** 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.

## Technical Specifications:

### 1. Radio Specifications

Frequency Range(MHz)	698 to 2700
VSWR	< 1.2
Coupling	6dB±0.9dB
Isolation	30dB minimum
PIM (typ)	≤-160dBc @2×+43dBm
Impedance	50Ω
Power Handling	500W Per Port 3000W Peak

### 2. Environmental Specifications

Temperature Range	-35 to +70 ° C
Humidity	0 - 99%
Application	Indoor or Outdoor, IP65

### 3. Mechanical Specifications

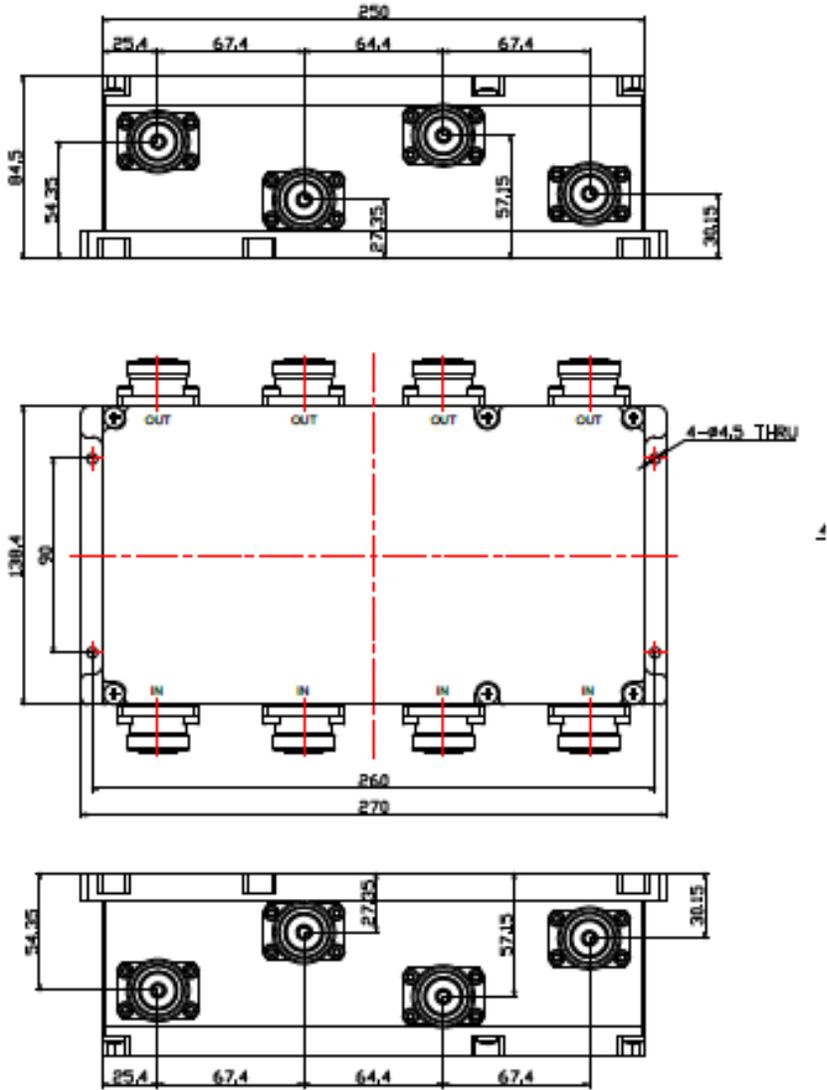
Connectors	DIN Female
Mounting Options	Mounting Holes
Color	Cavity aluminum silverplated Connector :Cooper
Size/Dimensions	270 * 138 * 84.5 mm
Weight	5 Kg



EMTS Telecom Services 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.

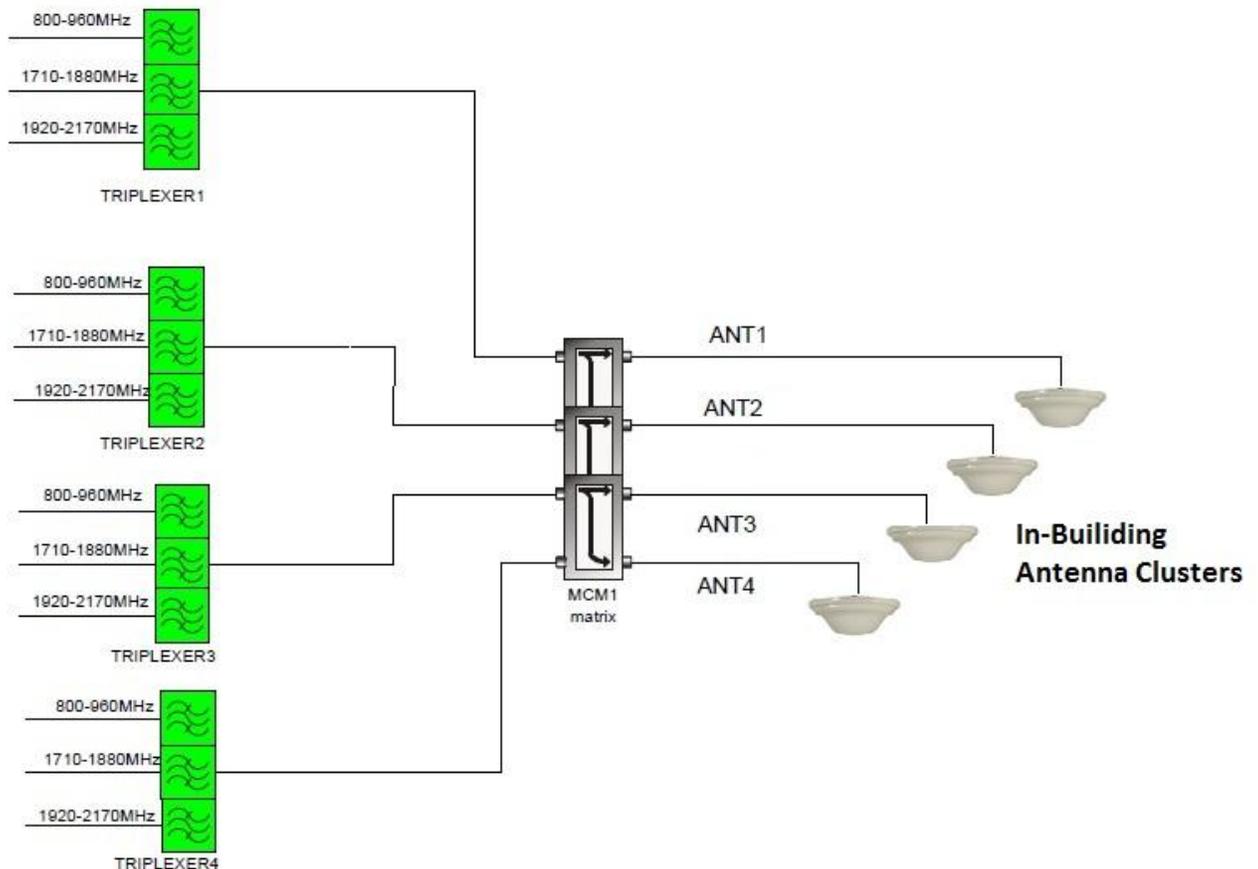
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## Outline Drawing:



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Typical Application  
Combining 4 different mobile carriers into same indoor Passive DAS



- Each ANT output usually feeds 20-50 in-buliding antennas depending on the RF planning
- The above frequency bands are for an example only. Any combination of bands can be combined to feed the matrix & each Input can be with a different frequency band



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