

SPECIFICATION

Part No.	:	CM.02.03F21.02806		
Product Name	:	Ceiling-mounted 3dBi Wide-band Antenna		
		700MHz to 6GHz		
Feature	:	Boosts coverage and data-rate performance of		
		following communication systems		
		LTE/GSM/CDMA/HSPA/UMTS/WCDMA		
		WIFI/ WIMAX/ ISM		
		High peak gain, high efficiency ceiling antenna		
		Custom cables and connectors available		
		RoHS ✓		





I. Introduction

Taoglas Ceiling Mount Antenna CM.02 is a wideband antenna solution, 700 MHz to 6GHz, covering all cellular, Wi-Fi and WiMAX applications in one antenna. The antenna has high peak gain and efficiency across all bands enabling very wide coverage areas and high speed data rates. The radiation pattern has excellent Omni-directional properties at all frequencies, a unique feature of this wide-band antenna compared to other designs in the market which tend to have nulls at certain bands. This antenna would provide all CPE and Hotspot needs literally "under one roof".

The attractive, extremely light, and covert design allows the antenna to be easily mounted on a ceiling, and would be suited to any indoor area that would require a Wireless Network -Hotels, Conference Centre's, Exhibition Halls, Offices, retail outlets etc. The design is not obtrusive, only 97.5mm in height, and would blend in to any environment.



II. Specification

CELLULAR									
Frequency (GHz)	0.7 ~ 1.0	1.0 ~ 2.0	2.0 ~ 3.0	3.0 ~ 4.0	4.0 ~ 5.0	5.0 ~ 6.0			
Peak Gain (dBi)	1.6	1.9	3.0	3.6	3.6	4.4			
Average Gain (dBi)	-0.6	-0.6	-0.7	0.9	-1.4	-1.9			
Efficiency	88%	87%	85%	81%	73%	65%			
Impedance	50Ω								
Polarization	Vertical								
Radiation Pattern	Omni								
Input Power	50 W								
Cable	0.3m RG58 standard, fully customizable								
Connector	N Type (Female)								
MECHANICAL									
Dimensions		Height 97.5mm x Diameter 167.5mm							
Casing		UV resistant ABS							
Base		Aluminum							
Thread		17.25 mm ABS							
Weight		208g							
ENVIRONMENTAL									
Temperature Ra	nge	-40°C to 85°C							
Humidity		Non-condensing 65°C 95% RH							



III. Antenna Characteristics

III.1. Return Loss









III.3. Antenna Efficiency



III.4. Peak Gain





III.5. Antenna 3D Average Gain



III.6. Radiation Pattern





XY-plane



XZ-plane





IV. Antenna Drawing





Unit : mm