

# Omni base station antennas

## Product Overview

### Reliable, High Performing & Market Leading

In advanced communication networks, the reliance for the network to do what it was planned for is paramount. Public Safety networks, at a time when it is most critical, should just simply work. Communicate.

TETRA networks have deployed our colinear antennas since the very first network back in the mid 1990's. Today LTE networks face the same challenges, not just for Public Safety, but all LTE communication networks.

### Experience Counts

With many decades of experience in designing and manufacturing products for networks such as VHF, UHF, GSM, LTE and Public Safety, our colinear offering has the same quality reliable performance, even in the harshest of conditions, whilst maintaining a high Quality of Service for your network. Ease of installation and no maintenance make our solutions ideal.

With years of global acceptance and solution implementations, we have been working with global System Integrators and Mobile Network Operators throughout Europe, North America and Middle East for deployment in their local and regional networks.

Amphenol Procom has a strong portfolio of Colinear antennas suited for even the harshest environment, tested to withstand temperatures as low as -55c (-67f) and survive wind speeds of 186mph (300kph).

The electrical characteristics are just as impressive. All are PIM spec'd @ -153dBc, PIP rated as 25kW, power rated up to 600W with fixed tilt options and various gain choices.

### 4220 UHF Colinear

Our product offering for UHF bands consists of 3, 6, & 9dBd, all with 7/16 DIN female connectors period. See spec sheet for more details, summary below.

Model	Protocol	Freq (MHz)	Gain (dBd)	Beam Tilt (degrees)	Null Fill	Power (W)
4220.03-405-Tx	TETRA / P25	380 - 430	3	0 - 12	-	300W
4220.03-445-Tx	LMR / PMR	420 - 470	3	0 - 12	-	300W
4220.06-405-Tx	TETRA / P25	380 - 430	6	0 - 12	-	300W
4220.06-445-Tx	LMR / PMR	420 - 470	6	0 - 12	-	300W
4220.09-445-Tx	TETRA / P25	380 - 430	9	0 - 12	-	300W
4220.09-445-Tx	LMR / PMR	420 - 470	9	0 - 12	-	300W

### 4240 LTE Colinear

This range focuses on LTE and GSM networks. In addition to 3, 6, & 9dBd there is also a 7.5 dBd version. 7/16 DIN female connector as standard. See spec sheet for more details, summary below.

Model	Protocol	Freq (MHz)	Gain (dBd)	Beam Tilt (degrees)	Null Fill	Power (W)
4240.03-780-Tx	LTE700 / LTE800	695 - 870	3	0 - 6	-	350
4240.03-875-Tx	LTE / GSM900	790 - 960	3	0 - 6	-	350
4240.06-780-Tx	LTE700 / LTE800	695 - 870	6	0 - 6	-	400
4240.06-875-Tx	LTE / GSM900	790 - 960	6	0 - 6	-	400
4240.09-780-Tx	LTE700 / LTE800	695 - 870	9	0 - 6	-	400
4240.09-875-Tx	LTE / GSM900	790 - 960	9	0 - 6	-	400
4240.95-780-Tx	LTE700 / LTE800	790 - 960	9.5	0 - 6	-	400
4240.95-875-Tx	LTE / GSM900	695 - 870	9.5	0 - 6	-	400

### 4250 LTE Null Fill Colinear

LTE Null Fill omni antennas covering 790-960MHz. The 4250 Series colinear antenna is designed for demanding applications where a durable and high performance colinear antenna is required. High quality materials and manufacturing techniques are employed to ensure that the antenna has best-in-class intermodulation performance.

Offering 9dBd / 11.2 dBi of gain, 25kW of PIP, power handling of 400W. These models come with wide bandwidth characteristics for Cellular and other multi-channel communication systems. Built to withstand the harshest conditions, they are IP rated, come with lightning protection, and meet wind survival speeds of 186 mph.

Model	Protocol	Freq (MHz)	Gain (dBd)	Beam Tilt (degrees)	Null Fill	Power (W)
4250.09-780-Tx	LTE700 / LTE800	695 - 870	9	0 - 6	25%	400
4250.09-875-Tx	LTE / GSM900	790 - 960	9	0 - 6	25%	400

### 4280 LTE Null Fill Colinear

This range focuses on LTE and GSM networks. This high gain, 11.5 dBd antenna comes with Null Fill low PIM fitted with a 7/16 DIN female

connector as standard. See spec sheet for more details, summary below.

Model	Protocol	Freq (MHz)	Gain (dBd)	Beam Tilt (degrees)	Null Fill	Power (W)
4280.11-780-Tx	LTE700 / LTE800	740 - 870	11.5	0 - 6	25%	600

These carefully designed colinear antennae are sealed to an IP 56 rating using a high-quality, glass fibre shroud. All models are lightning protected to 200 kA according to EN 62305-1 (Test pulse 10/350 µs), PIM spec is -153dBc (3rd Order, 2 x Tx@43dBm). Peak instantaneous power (PIP) rating is 25kW.





## About Amphenol Procom

At Amphenol Procom, we are committed to providing solutions that can be trusted no matter how extreme the environment, or how complex the complete network solution might be. Our mission is simply to: *"deliver the world's most trusted and flexible solutions for professional wireless communication where connectivity and dependability are critical"*

Your network relies on the quality of its components; if one goes down, it can take the rest with it. That's why our products are built for quality and tested to the extreme - so that performance is not compromised under any circumstances. Amphenol Procom consists of the former Procom, Jaybeam and Skymast brands, that with manufacturing in Denmark and the UK serve a wide range of market segments such as Public Safety, Aviation, Telecom, Hazardous Environments, IOT, Transportation and Industry.

We have more than 7.000 products in our portfolio, mainly covering base station antennas, portable & mobile antennas, combiners, filters and DAS solutions.

Amphenol Procom is a division of the Amphenol Corporation, a \$7 billion-dollar organization that is one of the largest manufacturers of interconnect products in the world. The company designs, manufactures and markets electrical, electronic and fiber optic connectors, coaxial and flat-ribbon cable, and interconnect systems.



## Colinear Antennas for Network Infrastructure

### Introducing the 42XX Series UHF & LTE Colinear Antennas



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