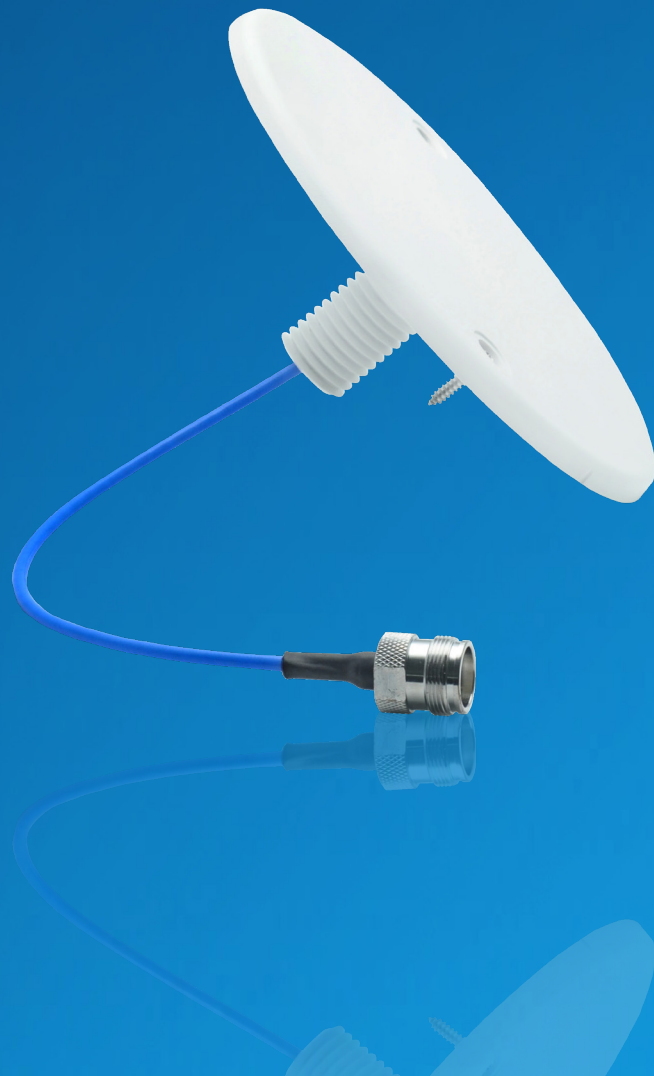


Distributed Antenna Systems (DAS)

For Cellular/LTE and Public Safety

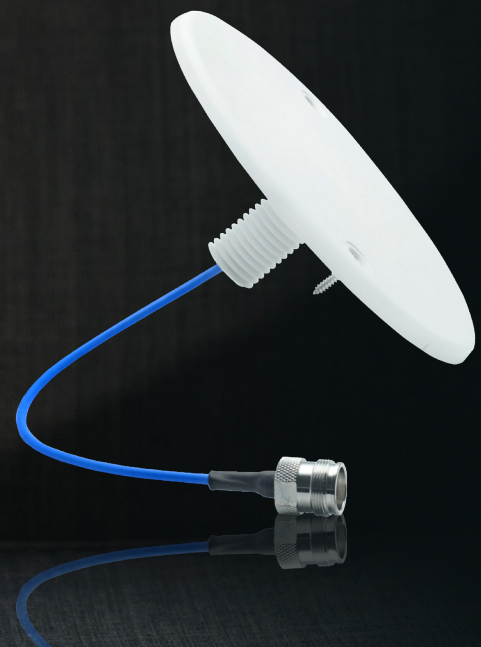


Industry-leading Innovation

The market for Distributed Antenna Systems (DAS) is growing rapidly- from \$7.75 billion back in 2017, to a projected \$13.74 billion by 2021¹. This growth is expected across markets such as public sector, enterprises, healthcare, and industrial. DAS demand is driven by increasing mobile data traffic, the proliferation of connected devices due to the Internet of Things (IoT), the rising need for spectrum efficiency, and the need for extended network coverage and connectivity everywhere.

Laird Connectivity continues to lead the industry with DAS innovation, being the first in the industry to introduce:

- 2-port and 4-port low profile MIMO antennas
- QR bar code antenna specification label
- Ultra low-profile antennas in the CBRS bands (for SISO and MIMO).
- Laird Connectivity is developing new products for future-proof DAS and small cell installations for both cellular and public safety networks.



¹Distributed Antenna System (DAS) Market by Offering, [marketsandmarkets.com](https://www.marketsandmarkets.com), 2018

Laird Connectivity's DAS Antenna Portfolio - By Type

For a complete listing, visit lairdconnect.com/rf-antennas

MIMO- 2-Port, Low PIM, OMNI DAS Antennas

			
	5G Ready	5G Ready	
Antenna Model	CMD69423P	CFD69383P	CMD69273P
Style	Low Profile Circular 2-Port	Ultra Low Profile Circular 2-Port	Low Profile Circular 2-Port
Dimensions (Diameter x Height)	8.6" x 1.7"	9.84" x 0.3"	8.6" x 1.7"
Thickness	Low Profile (best performance)	Lowest Profile (good performance)	Low Profile (best performance)
Frequency Bands (MHz)	698-960/1300-4200	698-960/1350-1550/1690-4000	698-960/1710-2700
VSWR	2:1	< 1.4:1	< 1.7:1
Gain (dBi)	3.9-6.8	3.8	3.9
Polarization at each port	Vertical & Horizontal	Linear, Horizontal	Vertical & Horizontal
PIM, Third Order, 2 x 20W	<-150	< -158 dBc	< -154 dBc

SISO, Low PIM, Omnidirectional DAS Antennas

				
	5G Ready			
Antenna Model	CFSA69383P	CFS60383P	CFSA35606P	CLS69273P
Style	Ultra-Low Profile Circular	Ultra-Low Profile Rectangular	Ultra-Low Profile Circular	Low-Profile Circular
Dimensions (Diameter x Height)	7.1" x 0.3"	7.1" x 4.6" x 0.3"	10.6" X .30"	9.84" x 1.87"
Thickness	Lowest Profile (good performance)	Lowest Profile (good performance)	Lowest Profile (good performance)	Low Profile (better performance)
Frequency Bands (MHz)	698-960/1350-1550/ 1690-4000	600-960/1350-1550/ 1690-3800	350-520/600-960/ 1350-1550/1690-6000	698-960/1695-2700
VSWR	< 1.2:1	< 1.5:1	<2.5:1	< 2.0:1
Gain (dBi)	3.5	3.6	7.3 @4900-5925 MHz	2.6
Polarization at each port	Horizontal	Horizontal	Vertical	Vertical
PIM, Third Order, 2 x 20W	< -160 dBc	< -156 dBc	<-150	< -156 dBc

Low PIM, Directional DAS Antennas



Antenna Model	PAV69278PO	PAS69278P
Style	SISO Outdoor	2-Port MIMO Indoor/Outdoor
Dimensions (Diameter x Height)	9.82" x 9.8" x 2.41"	11.6" x 11.6" x 3.2"
IP Rated	IP67	IP55
Frequency Bands (MHz)	698-960 / 1710-2700	698-960 / 1710-2700
VSWR	< 1.8:1	< 2.0:1
Gain (dBi)	7.6	9.1
Polarization at each port	Vertical	Slant 345°
PIM, Third Order, 2 x 20W	< -150 dBc	< -151 dBc

MIMO, 4-Port, Low PIM, Omnidirectional DAS Antennas



Antenna Model	CMQ69273P
Style	Low Profile Circular 4-Port
Dimensions (Diameter x Height)	2.9" x 2.2"
Thickness	Average Profile (good performance)
Frequency Bands (MHz)	698-960 / 1710-2700
VSWR	< 1.8:1
Gain (dBi)	.4
Polarization at each port	Linear
PIM, Third Order, 2 x 20W	< -154 dBc

DAS Brochure 2019 - v2

Laird Connectivity designs and manufactures all DAS antennas in-house, enabling the delivery of the best quality, low PIM, DAS solutions that are stocked locally for our customers. Each antenna is tested for compliance and must pass post-production S-parameter and PIM testing before being packaged for shipment, ensuring reliability and quality. Laird Connectivity labels each antenna with a QR code that captures and can display critical production data.

Learn more by visiting lairdconnect.com/rf-antennas