

SYNZEN

PRODUCT GUIDE

2024



LTE450 | 5G | LTE CAT-M | NB-IoT | WIFI | BLE | ISM / LoRa | GNSS | UWB



Standard Products

Synzen offers top-quality standard antennas for reliable communication in any environment. With a wide range of antenna types including ceramic, laminate, FPC, and Terminal solutions. Trust Synzen for superior antenna solutions.



Custom Design

Looking for a unique antenna solution? Synzen Antenna Company provides custom antenna design services to meet your specific needs. Contact us today.

Free Support Services

We offer free support test services including optimization, tuning, chamber testing, and provide a full detailed report for your device performance including Efficiency, Peak Gain, 3D radiation patterns. Trust us for reliable antenna performance.



Contact Us

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Phone: +886 (0) 2 2659 8030

Technical Capabilities – Synzen Advantages

SYNZEN specializes in designing active and passive antennas for Automotive, Medical and IoT applications. Whether you are looking for a standard antenna, a custom design or additional support for an ongoing project we can help at any stage of your development.

STANDARD PRODUCT RANGE

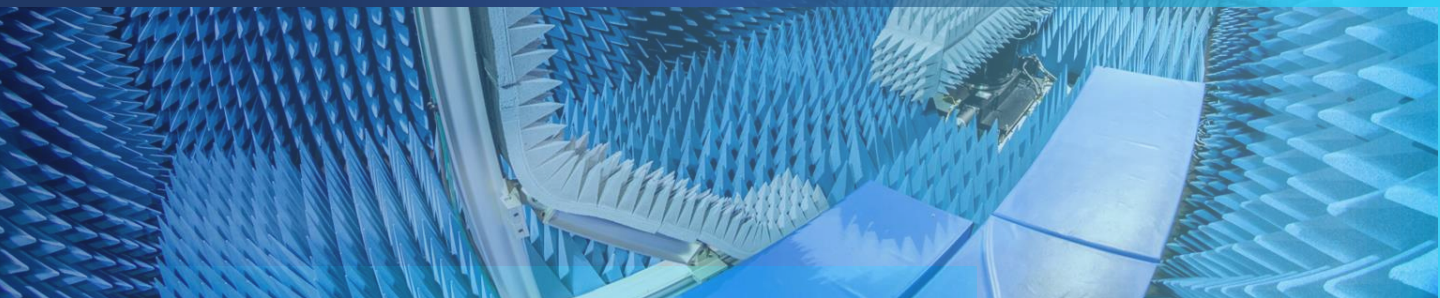
Synzen has an ever-evolving portfolio of standard embedded active and passive antennas. Products that are designed to work together in multi-antenna systems to ensure class leading isolation and cross correlation for optimal performance and reliability.

CUSTOM DESIGN

For applications where a standard part cannot meet your requirements, we can support you with a bespoke solution. Our free consultation service facilitates multiple discussions to take place to ensure you take the right path for your project development and includes a full ongoing technical assessment.

FREE PASSIVE CHAMBER TESTS

Upon engagement using a standard part and having discussed position and layout with you to ensure the design is optimal, we offer a free tuning and test service to fully characterize your device and provide a full test report which includes S11, Efficiency, Gain and full 3D radiated patterns.



CONTINUED SUPPORT

As well as support for the initial development stages, we will continue to provide support as your design progress to MP including a full check of all design files prior to you building prototypes or final products. We can additionally assist with issues unrelated to the antenna such as noise mitigation and RF Schematic/layout checking services Meetings can be setup easily and quickly to ensure your project remains on schedule.

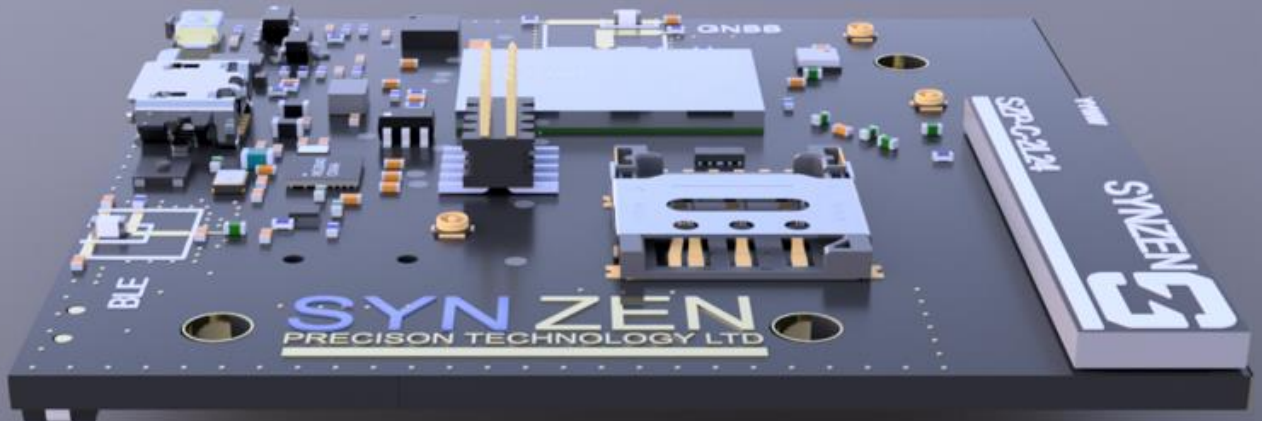
FREE SAMPLES

Free standard part samples available at www.synzen.com.tw



Technical Capabilities - Applications

Synzen antennas are designed for multiple applications, and for various types of integration whether embedded, internal or external to the device. With products that utilise state-of-the-art manufacturing capabilities to ensure best-in-class performance, and reliability our antenna's outperform any environment.



Technical Capabilities – Selection Process

A| CONSULTATION:

- Support with overview of device development with input from Synzen Engineers
- Simulation / Feasibility study to understand device performance, Synzen can 3D print and replicate major device components to complete full RF dataset including chamber tests.

B| INTEGRATION:

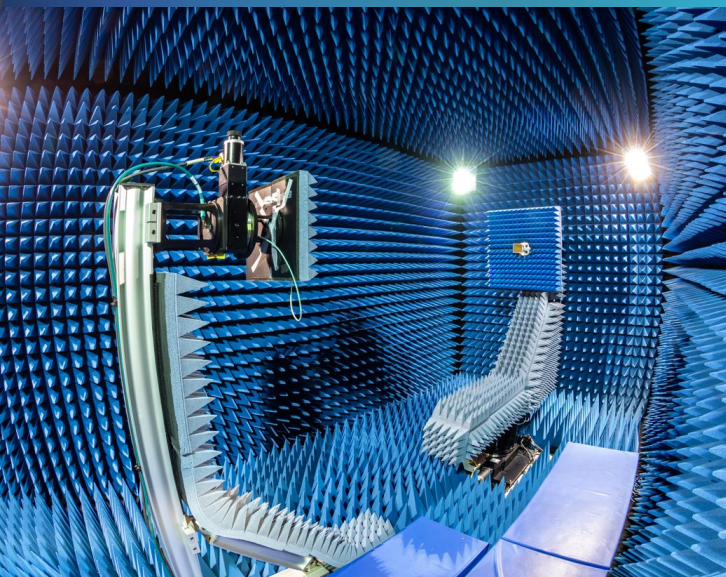
- Antenna selection
- Guidance for placement, full device review (PCB Layout, 3D CAD)
- Prototype testing; Full RF tune and test for a comprehensive report of device performance. S-parameter (S_{11} , S_{21}), Efficiency, Gain and Peak Gain, ECC (Envelope Correlation Coefficient).

C| FINAL DEVICE OPTIMIZE AND TEST:

- AOS (Antenna Optimisation Service) Tune all matching circuits for the final assembly and verify with chamber testing. Estimate TRP.
- Pre-Certification testing for PTCRB, RSE, GNSS simulator tests.

D| MASS PRODUCTION:

- Multi-source manufacturing locations
- Continued customer support for the product lifetime. Support for new device revisions or changes .



Antenna Overview - Cellular


	PART NUMBER / NAME	DESCRIPTION	FREQUENCY RANGE
5G / 4G LTE / NB-IoT / 3G / 2G / LTE 450	SZP-C-2L22 (ALCOR)	Surface Mount / Low profile	617-6000MHz
	SZP-C-2L11 (ALTAIR)	Surface Mount	617-6000MHz
	SZP-C-2L23 (ATRIA)	Surface Mount / Low profile	698-2690MHz
	SZP-C-2L22 (ARCALIS)	Surface Mount / Low profile	698-2690MHz
	SZP-C-0L02 (OPALA)	Surface Mount	698-2690MHz
	SZP-C-0L09 / 10 (PROCYON a / b)	Surface Mount	698-2690MHz
	SZP-C-1C02/3 (TAU1/2)	Surface Mount / Low profile	791-2690MHz
	SZP-C-0C01 (CETI)	Surface Mount	824-1990MHz
	SZP-C-1L11/12 (ARRAKIS a / b)	Surface Mount	698-2690MHz
	SZC-C-2L21 (PALOMAR)	Ceramic SMD	3300-5000MHz
	SZK-C-3L29 (ASCELLA)	FPC + Cable (Flex)	450-5000MHz
	SZK-C-1L14 (ARCTURUS)	FPC + Cable (Flex)	617-5000MHz
	SZK-C-3L31 (ALUDRA)	FPC + Cable (Flex)	617-4200MHz
	SZK-C-0L05 (ANTARES)	FPC + Cable (Flex)	617-5000MHz
	SZK-C-0L04 (LALANDE)	FPC + Cable (Flex)	698-2690MHz
	SZK-C-0L06 (AVICI)	FPC + Cable (Flex)	698-2690MHz
	SZK-C-2L18 (AVIOR)	FPC + Cable (Flex)	791-2690MHz
	SZK-C-2L20 (PETRA)	FPC + Cable (Flex)	698-2690MHz
	SZK-C-2L28 (EARENDEL)	FPC + Cable (Flex)	698-2690MHz
	SZK-C-3L30 (CAPH)	FPC + Cable (Flex)	698-2690MHz
	SZK-C-3L32 (PETRA2)	FPC + Cable (Flex)	698-2690MHz
	SZK-C-2C04 (ELECTRA)	FPC + Cable (Flex)	824-2200MHz
	SZK-C-3D01 (MERGA)	FPC + Cable (Flex) LTE+ Wi-Fi	698-2700MHz 2400-2500; 5150-7125MHz
	SZK-C-1L08 (PERSEI)	FR4 + Cable (Rigid)	698-2690MHz
	SZK-C-1L07 (PEGASI)	FR4 + Cable (Rigid)	617-5000MHz
	SZW-N-1L15 (TELESTO)	Terminal	617-7150MHz
	SZW-N-1L16 (ATLAS)	Terminal	617-7150MHz
	SZW-N-1L17 (TITAN)	Terminal	617-7150MHz
	SZW-N-3L35 (EUROPA)	Panel / Ceiling Mount	400-5850MHz
	SZW-N-2L26 (OBERON)	Panel Mount	430-2690MHz
SZW-N-2L27 (OPHELIA)	Wall Mount	430-2690MHz	

Synzen cellular antennas operate over the full 5G, 4G LTE, NB-IoT, and 3G networks. Available in multiple package styles, including SMD type, Flexible adhesive type, FR4 rigid adhesive type, and panel and wall mount.




CELLULAR ANTENNAS | 5G/4G LTE/LTE450/3G/2G/NB-IoT


ALCOR | Low Profile Surface Mount Antenna | 5G

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ALCOR SZP-C-2L22 Click for Datasheet	40.0 x 10.0 x 1.6	617-960 1452-1496 1710-2200 2300-2400 2500-2690 3300-4200 4400-5000 5000-6000	>55 >40 >65 >60 >55 >50 >45 >40	2.05 0.00 3.49 3.77 3.99 5.22 3.26 1.70

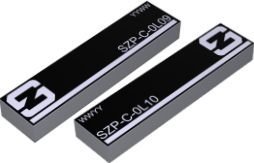
ALTAIR | Surface Mount Antenna | 5G

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ALTAIR SZP-C-2L14 Click for Datasheet	40.0 x 10.6 x 3.3	617-960 1452-1496 1710-2200 2300-2400 2500-2690 3300-4200 4400-5000 5000-6000	>60 >45 >75 >70 >60 >65 >45 >40	1.47 0.01 2.82 3.69 3.26 5.91 3.18 2.94


ATRIA | Low Profile Surface Mount Antenna | 4G LTE / NB-IoT

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ATRIA SZP-C-2L23/24 Click for Datasheet	30.0 x 7.0 x 1.6	698-960 1710-2200 2300-2400 2500-2690	>50 >60 >50 >55	1.50 3.71 0.97 2.15


PROCYON | Surface Mount Antenna | 4G LTE / NB-IoT

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	PROCYONa/b SZP-C-0L09/10 Click for Datasheet	30.0 x 7.0 x 3.3	698-960 1710-2200 2300-2400 2500-2690	>50 >60 >60 >50	1.20 3.10 2.50 3.20

ARRAKIS | Surface Mount Antenna | 4G LTE / NB-IoT


	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ARRAKISa/b SZP-C-1L12 / 13	30.0 x 7.0 x 3.3	698-960 1710-2200 2300-2400 2500-2690	>60 >65 >55 >60	2.20 3.20 3.15 3.15

TAU | Low Profile Surface Mount Antenna | 4G LTE / NB-IoT


	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	TAU1/2 SZP-C-1C02 Click for Datasheet	26.0 x 6.0 x 1.7	791-960 1710-2200 2300-2400 2500-2690	>55 >55 >60 >65	1.14 2.99 2.67 3.00

CELLULAR ANTENNAS | 5G/4G LTE/LTE450/3G/2G/NB-IoT


OPALA | Surface Mount Antenna | 4G LTE

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	OPALA SZP-C-0L02 Click for Datasheet	32.8 x 9.6 x 3.3	698-960 1710-2200 2300-2400 2500-2690	>50 >55 >50 >50	1.50 3.40 2.70 1.50


ARCALIS | Low Profile Surface Mount Antenna | 4G LTE

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ARCALIS SZP-C-3L33 Click for Datasheet	23.0 x 9.6 x 1.7	698-960 1710-2200 2300-2400 2500-2690	>40 >60 >70 >45	1.30 3.30 2.80 1.88


CETI | Surface Mount Antenna | 3G

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	SZP-C-0C01 Click for Datasheet	25.0 x 10.0 x 3.3	824-960 1710-1990	>50 >55	0.60 2.40


ARCTURUS | Flexible Self-Adhesive Antenna with Cable | 5G

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ARCTURUS SZK-C-1L14 Click for Datasheet	88.0 x 14.0 x 0.2 Cable=180mm* IPEX MHFI**	617-960 1452-1660 1710-2200 2300-2690 3300-3800 4200-5000	>50 >30 >60 >70 >50 >45	2.80 1.20 2.90 3.20 4.20 3.10


ANTARES | Flexible Self-Adhesive Antenna with Cable | 5G

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ANTARES SZK-C-0L05 Click for Datasheet	100.0 x 20.0 x 0.2 Cable = 180mm* IPEX MHFI**	617-960 1452-1660 1710-2200 2300-2690 3300-3800 4200-5000	>50 >65 >65 >70 >70 >30	2.60 3.20 3.10 3.70 4.50 4.40

LALANDE | Flexible Self-Adhesive Antenna with Cable | 4G LTE / NB-IoT


	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ANTARES SZK-C-0L05 Click for Datasheet	100.0 x 20.0 x 0.2 Cable = 180mm* IPEX MHFI**	617-960 1452-1660 1710-2200 2300-2690 3300-3800 4200-5000	>50 >65 >65 >70 >70 >30	2.60 3.20 3.10 3.70 4.50 4.40

MERGA | Flexible Self-Adhesive Antenna with Cable | 4G LTE / NB-IoT // Tri-Band Wi-Fi


	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	MERGA SZK-C-3D01 Click for Datasheet	80.0 x 15.0 x 0.2 Cable = 180mm* IPEX MHFI**	698-960 1710-2200 2300-2690 2400-2500 5150-7125	>50 >65 >65 >70 >70	2.60 3.20 3.10 3.70 4.50

CELLULAR ANTENNAS | 5G/4G LTE/LTE450/3G/2G/NB-IoT


AVICI | Flexible Self-Adhesive Antenna with Cable | 4G LTE / NB-IoT

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	AVICI SZK-C-0L06 Click for Datasheet	110.0 x 20.0 x 0.2	791-960 1710-2200 2300-2400 2500-2690	>60 >70 >65 >65	2.30 2.60 2.90 3.50

PETRA | Micro Flexible Self-Adhesive Antenna with Cable | 4G LTE / NB-IoT

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	PETRA SZK-C-2L20 Click for Datasheet	45.0 x 15.0 x 0.2	698-960 1710-2200 2300-2400 2500-2690	>50 >55 >50 >55	3.35 3.37 2.21 2.50

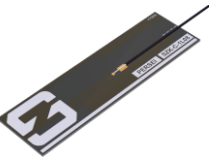
AVIOR | Micro Flexible Self-Adhesive Antenna with Cable | 4G LTE / NB-IoT

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	AVIOR SZK-C-2L18 Click for Datasheet	38.0 x 15.0 x 0.2	791-960 1710-2200 2300-2400 2500-2690	>65 >75 >70 >75	2.88 4.31 1.95 2.01


ELECTRA | Micro Flexible Self-Adhesive Antenna with Cable | 3G / NB-IoT

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ELECTRA SZK-C-2C04 Click for Datasheet	28.0 x 15.0 x 0.2	824-960 1710-2200	>65 >70	2.03 3.80

PERSEI | Rigid FR4 Self-Adhesive Antenna with Cable | 4G LTE / NB-IoT


	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	PERSEI SZK-C-1L08 Click for Datasheet	69.0 x 20.0 x 0.6	698-960 1452-1660 1710-2200 2300-2690 3300-3800 4200-5000	>50 >30 >60 >70 >50 >45	2.80 1.20 2.90 3.20 4.20 3.10

PEGASI | Rigid FR4 Self-Adhesive Antenna with Cable | 5G

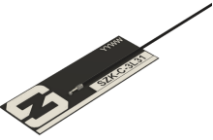
	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	PEGASI SZK-C-0L07 Click for Datasheet	100.0 x 20.0 x 0.6	617-960 1452-1660 1710-2200 2300-2690 3300-3800 4200-5000	>50 >65 >65 >70 >70 >30	2.60 3.20 3.10 3.70 4.50 4.40

CELLULAR ANTENNAS | 5G/4G LTE/LTE450/3G/2G/NB-IoT

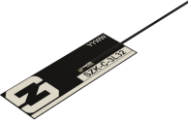
ASCELLA | Flexible Self-Adhesive Antenna with Cable | 5G / NB-IoT / LTE450

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ASCELLA SZK-C-3L29 Click for Datasheet	100.0 x 20.0 x 0.2 Cable = 300mm* IPEX MHFI**	450-470 617-960 1427-1660 1710-2200 2300-2400 2500-2690 3300-5000	>20 >50 >50 >50 >50 >50 >45	-4.40 3.70 3.30 3.30 1.40 2.90 3.20

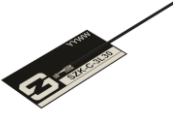
ALUDRA | Flexible Self-Adhesive Antenna with Cable | 5G / NB-IoT

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ALUDRA SZK-C-3L31 Click for Datasheet	44.0 x 15.0 x 0.2 Cable = 100mm* IPEX MHFI**	617-960 1525-1660 1710-2200 2300-2400 2500-2690 3300-4200	>55 >65 >65 >75 >75 >70	4.20 4.70 4.44 4.83 4.69 5.30


PETRA2 | Micro Flexible Self-Adhesive Antenna with Cable | 4G LTE / NB-IoT

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	PETRA2 SZK-C-3L32 Click for Datasheet	44.0 x 15.0 x 0.2 Cable = 100mm* IPEX MHFI**	698-960 1427-1660 1710-2200 2300-2400 2500-2690	>55 >60 >75 >80 >65	2.90 3.80 4.15 3.45 2.60


CAPH | Micro Flexible Self-Adhesive Antenna with Cable | 4G LTE / NB-IoT

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	CAPH SZK-C-3L30 Click for Datasheet	30.0 x 15.0 x 0.2 Cable = 100mm* IPEX MHFI**	698-960 1525-1660 1710-2200 2300-2400 2500-2690	>55 >60 >75 >75 >60	4.50 3.10 4.0 4.20 3.50

EARENDEL | Micro Flexible Self-Adhesive Antenna with Cable | 4G / NB-IoT


	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	EARENDEL SZK-C-2C04 Click for Datasheet	50.0 x 8.5 x 0.2 Cable = 100mm* IPEX MHFI**	698-960 1427-1660 1710-2200 2300-2400 2500-2690	>60 >70 >55 >65 >50	4.60 3.60 3.20 1.70 1.00

EUROPA | MIMO Ceiling/Panel Mount Antenna | 4G LTE / ISM433/868/915 / LTE 450 / Nb-IoT


	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	EUROPA SZW-N-3L35 Click for Datasheet	236 ϕ x 95.0 N-Type	400-470 600-960 1400-2200 2300-2700 5150-5850	>50 >70 >80 >80 >80	1.80 3.00 4.00 5.00 6.00

CELLULAR ANTENNAS | 5G/4G LTE/3G/2G/NB-IoT


TITAN | Terminal Antenna | 5G / Wi-Fi 7

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	TITAN SZW-C-1L17 Click for Datasheet	135.0 x Ø=13 SMA (M) Plug Connector	617-960	>40	1.00
			1452-1660	>50	2.00
			1710-2690	>55	2.00
			3300-4200	>55	2.00
			4400-5000	>55	2.00
			5150-7150	>55	2.00

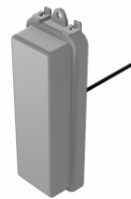
TELESTO | Terminal Antenna | 5G / Wi-Fi 7

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	TELESTO SZW-C-0L15 Click for Datasheet	160.0 x Ø=13 SMA (M) Plug Connector	617-960	>40	1.00
			1452-1660	>55	2.00
			1710-2690	>55	2.00
			3300-4200	>55	2.00
			4400-5000	>55	2.00
			5150-7150	>55	2.00


ATLAS | Terminal Antenna | 5G / Wi-Fi 7

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ATLAS SZW-N-1L16 Click for Datasheet	205.0 x Ø=13 SMA (M) Plug Connector	617-960	>50	1.00
			1452-1660	>60	2.50
			1710-2690	>60	2.50
			3300-4200	>60	2.50
			4400-5000	>60	2.50
			5150-7150	>60	2.50


OBERON | Panel Mount Antenna | 4G LTE / ISM433/868/915 / LTE 450 / Nb-IoT

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	OBERON SZW-N-2L26 Click for Datasheet	130.0 x 45.0 x 27.0 Cable = 3m* SMA plug**	430-480	>20	-4.50
			863-928	>60	2.73
			698-960	>50	3.77
			1427-1518	>50	1.29
			1710-2200	>60	3.18
			2300-2690	>55	3.43

OPHELIA | Wall Mount Antenna | 4G LTE / ISM433/868/915 / LTE 450 / Nb-IoT

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	OPHELIA SZW-N-2L27 Click for Datasheet	130.0 x 45.0 x 27.0 Cable = 3m* SMA plug**	430-480	>20	-4.50
			863-928	>60	2.73
			698-960	>50	3.77
			1427-1518	>50	1.29
			1710-2200	>60	3.18
			2300-2690	>55	3.43

PALOMAR | SMD Ceramic Chip Antenna | 5G B77/B79

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	PALOMAR SZC-C-2L21	1.6 x 0.8 x 0.8	3300-4200 / 4400-5000	>60	3.30

Antenna Overview – ISM / LoRa

	PART NUMBER / NAME	DESCRIPTION	FREQUENCY RANGE
ISM 433/868/915/LoRa	SZC-C-0M01 (VEGA)	Ceramic Ship SMD	863-928MHz
	SZC-C-1M07 (CORVI)	Ceramic Ship SMD	863-870; 902-928MHz
	SZC-C-3M12 (IRENA)	Ceramic Ship SMD	433MHz
	SZK-C-0M02 (CYGNI a)	FPC + Cable (Flex)	902-928MHz
	SZK-C-0M04 (CYGNI b)	FPC + Cable (Flex)	863-870MHz
	SZK-C-0M05 (SERPENTIS1)	FPC + Cable (Flex)	410-470MHz
	SZK-C-0M06 (SERPENTIS2)	FPC + Cable (Flex)	410-435MHz
	SZK-C-2M09 (CORVUS)	FPC + Cable (Flex)	863-870MHz
	SZC-C-2M10 (DRACONIS)	FPC + Cable (Flex)	863-902MHz
	SZW-N-1M07 (PROTEUS)	Terminal	863-870MHz
	SZW-N-1M08 (TRITON)	Terminal	902-928MHz
	SZC-N-3M13 (ARIEL1)	Ceramic Patch TH	863-870MHz
	SZC-N-3M14 (ARIEL2)	Ceramic Patch TH	902-938MHz




Synzen's ISM antennas are high-performance antennas designed for Industrial, Scientific, and Medical applications operating in the 433MHz, 868MHz, and 915MHz frequency bands. They come in three types: ceramic, flexible printed circuit (FPC), and terminal antennas.

These antennas offer excellent performance, reliability, and versatility. With a choice of three antenna types, engineers and designers can select the best antenna for their specific application. The self-adhesive design of these antennas makes them easy to install on a variety of surfaces. Synzen's ISM antennas are a popular choice for a wide range of ISM applications due to their small size and high performance.




ISM/LoRa ANTENNAS | ISM 433/868/915


VEGA | SMD Ceramic Chip Antenna | ISM 868/928

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	VEGA SZC-C-0M01 Click for Datasheet	1.6 x 0.8 x 0.8	863-928	>65	1.20

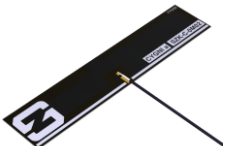
CORVI | SMD Ceramic Chip Antenna | ISM 868/928

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	CORVI SZC-C-1M07 Click for Datasheet	1.6 x 0.8 x 0.8	863-870 902-928	>50 >55	0.35 1.60


IRENA | SMD Ceramic Chip Antenna | ISM 433

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	IRENA SZC-C-3M12 Click for Datasheet	1.6 x 0.8 x 0.8	430-435	>50	0.10


CYGNIA | Flexible Self-Adhesive Antenna with Cable | ISM868

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	CYGNIA SZK-C-0M02 Click for Datasheet	70.0 x 15.0 x 0.2	902-928	>60	1.20


CYGNIB | Flexible Self-Adhesive Antenna with Cable | ISM915

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	CYGNIB SZK-C-0M04 Click for Datasheet	70.0 x 15.0 x 0.2	863-928	>70	1.21

DRACONIS | Micro Flexible Self-Adhesive Antenna with Cable | ISM868/915


	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	DRACONIS SZK-C-2M10 Click for Datasheet	33.0 x 8.0 x 0.2	863-870 902-928	>75 >65	1.40 0.76

CORVUS | Flexible Self-Adhesive Antenna with Cable | ISM868


	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	CORVUS SZK-C-2M09 Click for Datasheet	60.0 x 15.0 x 0.2	863-870	>64	0.91

ISM/LoRa ANTENNAS | ISM 433/868/915


SERPENTIS 1 | Flexible Self-Adhesive Antenna with Cable | 5G / Wi-Fi 7

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	SERPENTIS1 SZK-C-0M05 Click for Datasheet	88.0 x 15.0 x 0.2	410-427 430-435 450-467	>30 >45 >30	-3.00 -2.90 -3.00


SERPENTIS 2 | Flexible Self-Adhesive Antenna with Cable | 5G / Wi-Fi 7

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	SERPENTIS2 SZK-C-0M05 Click for Datasheet	88.0 x 15.0 x 0.2	410-427 430-435	>30 >40	-3.50 -3.00


PROTEUS | Terminal Antenna | 5G / Wi-Fi 7

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	PROTEUS SZW-N-1M07 Click for Datasheet	202.0 x ϕ =13 SMA (M) Plug Connector	863-870	>70	2.00

TRITON | Terminal Antenna | 4G LTE / ISM433/868/915 / LTE 450 / Nb-IoT

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	TRITON SZW-N-1M08 Click for Datasheet	202.0 x ϕ =13 SMA (M) Plug Connector	902-928	>70	2.00

ARIEL1/2 | Ceramic Patch Through Hole | ISM868/915

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ARIEL1/2 SZC-N-3M13/14 Click for Datasheet	25.0 x 25.0 x 4.0	863-870 902-928	>60 >60	2.00 2.00

Antenna Overview – Passive GNSS


	PART NUMBER / NAME	DESCRIPTION	FREQUENCY RANGE
GNSS	SZP-C-0G02 (LODESTAR)	Surface Mount Laminate	1559-1609MHz
	SZP-C-1G12 (ZENDE)	Surface Mount Laminate L1,L2, L5	1164-1300; 1559-1609MHz
	SZP-C-1G05/15 (HYDRA1/2)	Surface Mount Laminate	1559-1609MHz
	SZC-N-0G06 (ARIETIS a)	Ceramic Patch Surface Mount 12mm	1575.42 ±3
	SZC-N-0G07 (ARIETIS b)	Ceramic Patch Surface Mount 15mm	1575.42 ±3; 1605.0 ±3
	SZC-N-0G08 (ARIETIS c)	Ceramic Patch Surface Mount 18mm	1575.42 ±3; 1605.0 ±3
	SZC-N-0G09 (ARIETIS d)	Ceramic Patch Surface Mount 25mm	1575.42 ±3; 1605.0 ±3
	SZC-N-0G13 (POLARIS)	Low Profile Ceramic Patch Surface Mount 25mm	1575.42 ±3; 1605.0 ±3
	SZC-C-1G18 (SIRIUSb)	Ceramic Ship SMD	1559-1609MHz
	SZC-N-0G11 (ARCADY a)	Ceramic Patch Through hole 15mm	1575.42 ±3
	SZC-N-0G10 (ARCADY b)	Ceramic Patch Through hole 18mm	1575.42 ±3
	SZC-N-2G20 (REGULUS)	Low Profile Ceramic Patch Surface Mount 12mm	1575.42 ±3
	SZC-C-3G21 (LEONIS)	Ceramic Ship SMD	1559-1609MHz
	SZK-C-0G04 (ZETA)	FPC + Cable (Flex)	1559-1609MHz
	SZK-C-2G19 (MIMOSA)	FPC + Cable (Flex)	1559-1609MHz
	SZK-C-3G22 (TABIT)	FPC + Cable (Flex) L1,L2,L5	1164-1300; 1559-1609MHz
	SZC-N-3G30 (DIONE)	Ceramic Through hole L1,L5 25mm	1166-1186, 1559-1609MHz

Synzen offers a variety of GNSS antenna solutions including flexible FPC self-adhesive type, FR4 laminate, ceramic chip, ceramic patch, and active antennas. The flexible FPC self-adhesive type antenna is ideal for compact designs and easy installation, while the FR4 laminate antenna is cost-effective with high performance and reliability. The ceramic chip antenna is lightweight and offers high accuracy and low power consumption. The ceramic patch antenna is a low-profile solution suitable for space-constrained environments. The active antenna includes an integrated amplifier and SAW filter for improved signal strength and accuracy, making it suitable for high-precision applications. With a commitment to quality and performance, Synzen's GNSS antenna solutions provide a range of options to suit various applications.




GNSS ANTENNAS | L1/L5/L2


LODESTAR | Surface Mount Antenna | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	LODESTAR SZP-C-0G02 Click for Datasheet	6.0 x 5.0 x 0.9	1559-1609	>60	0.5


ZENDE | Surface Mount Antenna | GNSS L1/L2/L5

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ZENDE SZP-C-1G12 Click for Datasheet	25.0 x 10.0 x 1.0	1164-1300 1559-1609	>85 >80	2.88 2.49


SIRIUSb | SMD Ceramic Chip Antenna | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	SIRIUSb SZC-C-1G18 Click for Datasheet	1.6 x 0.8 x 0.8	1559-1609	>75	3.10


LEONIS | SMD Ceramic Chip Antenna | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	LEONIS SZC-C-3G21 Click for Datasheet	1.6 x 0.8 x 0.8	1559-1609	>70	1.60

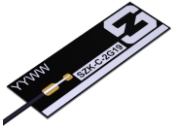
HYDRA | Surface Mount Antenna | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	HYDRA1/2 SZC-C-1L05/15 Click for Datasheet	7.5 x 5.0 x 0.9	1559-1609	>55	0.50

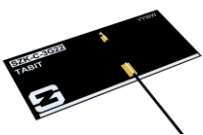
ZETA | Flexible Self-Adhesive Antenna with Cable | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ZETA SZK-C-0G04 Click for Datasheet	40.0 x 10.0 x 0.2	1559-1609	>70	2.00

MIMOSA | Flexible Self-Adhesive Antenna with Cable | GNSS L1


	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	MIMOSA SZK-C-1G19 Click for Datasheet	30.0 x 12.0 x 0.2	1559-1609	>70	2.80

TABIT | Flexible Self-Adhesive Antenna with Cable | GNSS L1,L2, L5


	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	TABIT SZC-C-3G22 Click for Datasheet	59.0 x 28.0 x 0.2	1164-1300 1559-1609	>60 >70	1.00 2.50

GNSS ANTENNAS | L1/L5/L2


REGULUS | Low Profile Ceramic Patch SMD | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	REGULUS SZC-N-2G20	12.0 x 12.0 x 2.0	1575.42 ±3	>55	0.5


ARIETISa | Ceramic Patch SMD | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ARIETISa SZC-N-0G06 Click for Datasheet	12.0 x 12.0 x 4.0	1575.42 ±3	>60	0.5


ARIETISb | Ceramic Patch SMD | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ARIETISb SZC-N-0G07 Click for Datasheet	15.0 x 15.0 x 4.0	1575.42 ±3 1605.0 ±3	>65	2.60


ARIETISc | Ceramic Patch SMD | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ARIETISc SZC-N-0G08 Click for Datasheet	18.0 x 18.0 x 4.0	1575.42 ±3 1605.0 ±3	>70	3.00


ARIETISd | Ceramic Patch SMD | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ARIETISd SZC-N-0G09 Click for Datasheet	25.0 x 25.0 x 4.0	1575.42 ±3 1605.0 ±3	>80	3.30

POLARIS | Low Profile Ceramic Patch SMD | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	POLARIS SZC-N-0G13 Click for Datasheet	25.0 x 25.0 x 2.0	1575.42 ±3 1605.0 ±3	>75	3.00

DIONE | Double Stack Through Hole Patch | GNSS L1/L5

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	DIONE SZC-N-3G30 Click for Datasheet	25.0 x 25.0 x 8.0	1575.42 ±3 1176 ±12	>60 >65	2.50 3.50

Antenna Overview – Active GNSS

	PART NUMBER / NAME	DESCRIPTION	FREQUENCY RANGE
GNSS	SZA-C-0G01 (CENTAURI)	Active Antenna SMD	1559-1609MHz
	SZA-C-0G03 (PROXIMA)	Active Antenna SMD	1559-1609MHz
	SZA-N-3G23 (MIMAS)	Active Antenna Patch with Cable	1575 ±1.023 MHz
	SZA-N-3G24 (TETHYS)	Active Antenna Patch with Cable	1575±1.023 / 1602±4.0 MHz
	SZA-N-3G26 (RHEA)	Active Antenna Patch with Cable	1176/1575.42 MHz
	SZA-N-3G27 (HYPERION)	Active Antenna Patch with Cable	1173-1281 / 1559-1609MHz




Synzen's GNSS antenna range includes active antennas with LNA and SAW filters across both SMD and ceramic patch types. The SMD variant stands out for its lower profile, making it ideal for space-restricted setups. With all antennas ensuring amplified signal strength and precision, Synzen delivers high-quality solutions for demanding applications.

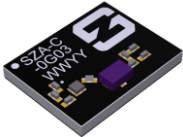


GNSS ANTENNAS | L1/L5/L2

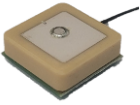
CENTAURI | Active Surface Mount Antenna | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)	
	CENTAURI SZA-C-0G01 Click for Datasheet		9.0 x 7.0 x 1.5	1559-1609	>60	18.5
		Configuration		Power Avg (mA)	Supply (V)	Noise figure
ANT → SAW → LNA			4.4	1.5-3.1	1.9	

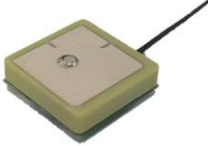
PROXIMA | Active Surface Mount Antenna | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)	
	PROXIMA SZA-C-0G03 Click for Datasheet		9.0 x 7.0 x 1.5	1559-1609	>60	18.2
		Configuration		Power Avg (mA)	Supply (V)	Noise figure
ANT → SAW → LNA			1.05	1.1 – 3.6	2.1	


MIMAS | Active Patch with Cable | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)	
	MIMAS SZA-C-3G23 Click for Datasheet		15.0 x 15.0 x 5.9	1575 ±1.023 1601±1.15	>50	20
		Configuration		Power Avg (mA)	Supply (V)	Noise figure
ANT → SAW → LNA			5.0	3.0 ±0.3	<2.0	

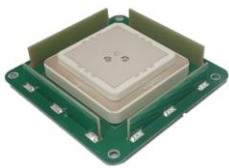
TETHYS | Active Patch with Cable | GNSS L1

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)	
	TETHYS SZA-N-3G24 Click for Datasheet		18.0 x 18.0 x 6.3	1575.42±1.023 1602±4.0	>60 >60	26
		Configuration		Power Avg (mA)	Supply (V)	Noise figure
ANT → SAW → LNA			13.0	3.0±2.0	<1.5	

RHEA | Active Patch with Cable | GNSS L1/L5

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)	
	RHEA SZA-N-3G26 Click for Datasheet		25.0 x 25.0 x 12.5	1176±10 1575.42±10	>60 >60	18.0
		Configuration		Power Avg (mA)	Supply (V)	Noise figure
ANT → SAW → LNA			20.0	3.0-5.0	<2.0	

HYPERION | Active Patch with Cable | GNSS L1/L2/L5

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)	
	PROXIMA SZA-C-0G03 Click for Datasheet		70.0 x 70.0 x 14.1	1173-1281 1558-1610	>70 >70	36.0
		Configuration		Power Avg (mA)	Supply (V)	Noise figure
ANT → SAW → LNA			25.0	3.0-5.0	<2.0	

Antenna Overview – Wi-Fi / Bluetooth

	PART NUMBER / NAME	DESCRIPTION	FREQUENCY RANGE
Wi-Fi / Bluetooth	SZP-C-0W01 (AULIN)	Surface Mount Laminate	2400-2500 MHz
	SZP-C-1W11/12 (ADARA1/2)	Surface Mount Laminate	2400-2500; 4900-7125 MHz
	SZP-N-2W05 (ERIDANI)	Surface Mount Laminate PIFA	2400-2500 MHz
	SZP-C-0W02 (SIRIUS a)	Ceramic Ship SMD	2400-2500 MHz
	SZC-C-2W14 (EPSILON)	Ceramic Ship SMD	2400-2500; 4900-7125 MHz
	SZC-C-3W17 (RISHA)	Ceramic Ship SMD	2400-2500 MHz
	SZC-N-3W21 (FULU)	Ceramic Patch	2400-2500 MHz
	SZK-C-0W03 (AQUARII)	FPC + Cable (Flex)	2400-2500; 4900-6000 MHz
	SZK-C-0W07 (WOLF)	FPC + Cable (Flex)	2400-2500; 4900-7125 MHz
	SZK-C-0W08 (MIRA)	FPC + Cable (Flex)	2400-2500; 4900-7125 MHz
	SZK-C-1W09 (AGENA)	FPC + Cable (Flex) MIMO	2400-2500; 4900-7125 MHz
	SZK-C-1W10 (HYDRUS)	FR4 + Cable (Rigid)	2400-2500; 4900-6000 MHz
	SZW-N-1W13 (LARISSA)	Terminal	2400-2500; 5150-7125 MHz

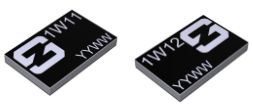


Synzen offers Wi-Fi antenna solutions for Wi-Fi5, Wi-Fi6, and Wi-Fi7, as well as Bluetooth antennas, with options of flexible FPC self-adhesive type, FR4 laminate, and ceramic chip antennas. The flexible FPC self-adhesive type Wi-Fi antenna is thin and lightweight, while the FR4 laminate Wi-Fi antenna provides high performance and reliability at a cost-effective price point. The ceramic chip Wi-Fi antenna is small and lightweight, suitable for wearable devices and smart home applications. Synzen's Wi-Fi antenna solutions also include options for Bluetooth, offering reliable wireless connectivity for IoT devices. Overall, Synzen's Wi-Fi antenna solutions provide a range of options to suit various applications, with a commitment to quality and performance that ensures their customers receive the best possible solution for their needs.




Wi-Fi / BLUETOOTH ANTENNAS | Wi-Fi5/6/7/BLE


ADARA | Surface Mount Antenna | Wi-Fi 5,6,7

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ADARA SZP-C-1W11	9.0 x 5.8 x 1.1	2400-2500	>48	0.80
	SZP-C-1W12 Click for Datasheet		5150-5850 5925-7125	>50 >55	2.48 2.82


EPSILON | SMD Ceramic Chip Antenna | Wi-Fi 5,6,7

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	EPSILON SZC-C-2W14	1.6 x 1.6 x 0.8	2400-2500	>50	0.90
	Click for Datasheet		5150-5850 5925-7125	>65 >60	2.26 2.52

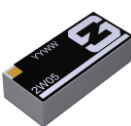
AULIN | Surface Mount Antenna | Wi-Fi/Bluetooth

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	AULIN SZP-C-0W01	5.0 x 4.0 x 0.9	2400-2500	>60	1.65
	Click for Datasheet				


SIRIUSa | SMD Ceramic Chip Antenna | Wi-Fi/Bluetooth

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	SIRIUSa SZC-C-0W02	1.6 x 0.8 x 0.8	2400-2500	>75	3.00
	Click for Datasheet				


ERIDANI | Surface Mount Antenna PIFA | Wi-Fi/Bluetooth

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ERIDANI SZP-N-2W05	12.5 x 5.4 x 3.3	2400-2500	>45	0.50
	Click for Datasheet				

RISHA | SMD Ceramic Chip Antenna | Wi-Fi/Bluetooth


	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	RISHA SZC-C-3W17	1.6 x 1.6 x 0.8	2400-2500	>60	0.90
	Click for Datasheet				

FULU | SMD Ceramic Patch Antenna | Wi-Fi/Bluetooth


	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	FULU SZC-N-3W21	12.0 x 12.0 x 4.0	2400-2500	>60	2.00
	Click for Datasheet				

Wi-Fi / BLUETOOTH ANTENNAS | Wi-Fi5/6/7/BLE


AQUARII Flexible Self-Adhesive Antenna with Cable | Wi-Fi 5,6

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	AQUARII SZK-C-0W03 Click for Datasheet	25.0 x 11.0 x 0.2 Cable = 100mm* IPEX MHF1 connector**	2400-2500 4900-6000	>65 >65	1.85 5.50

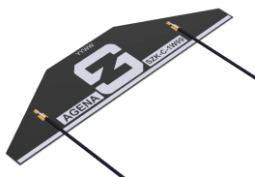
WOLF | Flexible Self-Adhesive Antenna with Cable | Wi-Fi 5,6,7 7

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	WOLF SZK-C-0W07 Click for Datasheet	25.0 x 11.0 x 0.2 Cable = 100mm* IPEX MHF1 connector**	2400-2500 4900-5850 5925-7125	>65 >65 >60	1.85 5.50 3.40

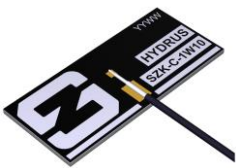
MIRA | Flexible Self-Adhesive Antenna with Cable | Wi-Fi 5,6,7

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	MIRA SZK-C-0W08 Click for Datasheet	30.0 x 6.0 x 0.2 Cable = 100mm* IPEX MHF1 connector**	2400-2500 4900-5850 5925-7125	>70 >60 >70	3.40 4.20 4.85


AGENA | Flexible Self-Adhesive Antenna with Cable MIMO | Wi-Fi 5,6,7

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	AGENA SZK-C-1W09 Click for Datasheet	75.0 x 20.0 x 0.2 Cable = 100mm* IPEX MHF1 connector**	2400-2500 4900-5850 5925-7125	>60 >65 >70	1.50 3.50 4.20

HYDRUS | Rigid FR4 Self-Adhesive Antenna with Cable | Wi-Fi 5,6

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	HYDRUS SZK-C-1W10 Click for Datasheet	25.0 x 11.0 x 0.2 Cable = 100mm* IPEX MHF1 connector**	2400-2500 4900-6000	>65 >65	1.85 5.50

LARISSA | Terminal Antenna | Wi-Fi 5,6,7

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	LARISSA SZW-C-1W13 Click for Datasheet	202.0 x \varnothing =13 SMA-Reverse (M) Plug connector	2400-2483 5150-7125	>50 >60	4.00 5.00

Antenna Overview – Ultra wide Band

	PART NUMBER / NAME	DESCRIPTION	FREQUENCY RANGE
UWB	SZP-C-0U01 (RIGEL)	Surface Mount Laminate	3200-7000MHz
	SZC-C-2U02 (ORIONIS)	Ceramic Chip	3200-7500MHz
	SZC-C-2U03 (CHARA)	Ceramic Chip	6000-9500MHz
	SZK-C-2U04 (VELORUM)	FPC + Cable (Flex)	3200-7000MHz
	SZK-C-2U05 (LUPI)	FPC + Cable (Flex)	3200-7500MHz

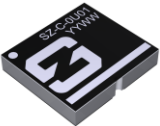


Synzen's Ultra-Wide Band (UWB) antenna solutions include flexible FPC self-adhesive type, FR4 laminate, and ceramic chip antennas. The flexible FPC self-adhesive type antenna is thin and lightweight, ideal for easy installation and compact designs. The FR4 laminate antenna is cost-effective and reliable, suitable for asset tracking and indoor positioning. The ceramic chip antenna is small and lightweight, with high performance making it ideal for wearable devices and smart homes. With a commitment to quality and performance, Synzen's UWB antenna solutions provide a range of options to suit various applications.




UWB ANTENNAS | Ultra-Wide-Band


RIGEL | Surface Mount Antenna | UWB

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	RIGEL SZP-C-0U01 Click for Datasheet	10.0 x 9.0 x 1.7	3200-4800 5900-7000	>80 >70	3.60 1.50

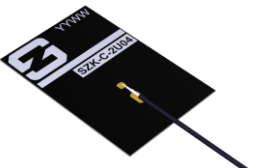
ORIONIS | SMD Ceramic Chip Antenna | UWB

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	ORIONIS SZC-C-2U02 Click for Datasheet	1.6 x 0.8 x 0.8	3200-4800 4900-7500	>75 >70	3.40 4.89

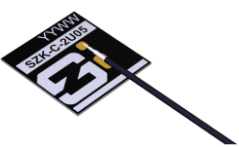
CHARA | SMD Ceramic Chip Antenna | UWB

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	CHARA SZC-C-2U03 Click for Datasheet	1.6 x 0.8 x 0.8	6000-9500	>75	5.99

VELORUM | Flexible Self-Adhesive Antenna with Cable | UWB

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	VELORUM SZK-C-2U04 Click for Datasheet	10.0 x 9.0 x 1.7	3200-4800 5900-7000	>80 >70	3.60 1.50

LUPI | Flexible Self-Adhesive Antenna with Cable | UWB

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	LUPI SZK-C-2U05 Click for Datasheet	1.6 x 0.8 x 0.8	3200-4800 4900-7500	>75 >70	3.40 4.89

RF Modules

	PART NUMBER / NAME	DESCRIPTION	TYPE
RF Modules	SZA-N-4G32	GNSS L1/L2/L5 Front end module	SMD

Synzen's connectors and cables, including MHF1, MHF4, MMCX, MCX, and SMA connectors, offer reliable and high-performance connections for wireless communication, IoT devices, and RF applications. These connectors come in various sizes and are designed for use in different applications, with SMA known for its rugged design and excellent electrical performance.


To complement their antenna range, Synzen offers RF cables in various lengths and types, such as coaxial, RG, and low-loss cables. Together, these connectors and cables provide customers with a complete and reliable solution for high-performance wireless connectivity.

By choosing Synzen's connectors and cables, customers can ensure optimal performance and signal quality in their wireless communication systems. With a range of options available, Synzen's connectors and cables are a reliable choice for customers seeking high-performance and dependable connections.



UWB ANTENNAS | Ultra-Wide-Band

CHARON | Front End Module | GNSS L1, L2, L5

	Part No. / Name	Size (mm)	Frequency (MHz)		Peak Gain (dBi)
	CHARON SZA-N-4G32 Click for Datasheet	15.5.0 x 15.0 x 3.5	1166-1249 1559-1609		18.2
		Configuration	Power Avg (mA)	Supply (V)	Noise figure
See Datasheet	10.6	1.8-5.5	2.1		

Connectors and Cable Assemblies

	PART NUMBER / NAME	DESCRIPTION	TYPE
Board Connectors	SZT-01	MHF1 Receptacle	SMD
	SZT-04	MHF4 Receptacle	SMD

Coming soon

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Connectors | PCB Mounted

MHF1 | SMD Mount Receptacle

	Part No.	Type	Contact	Impedance	Mounting type
	SZT-01	MHF1	PCB	50R	PCB Mount

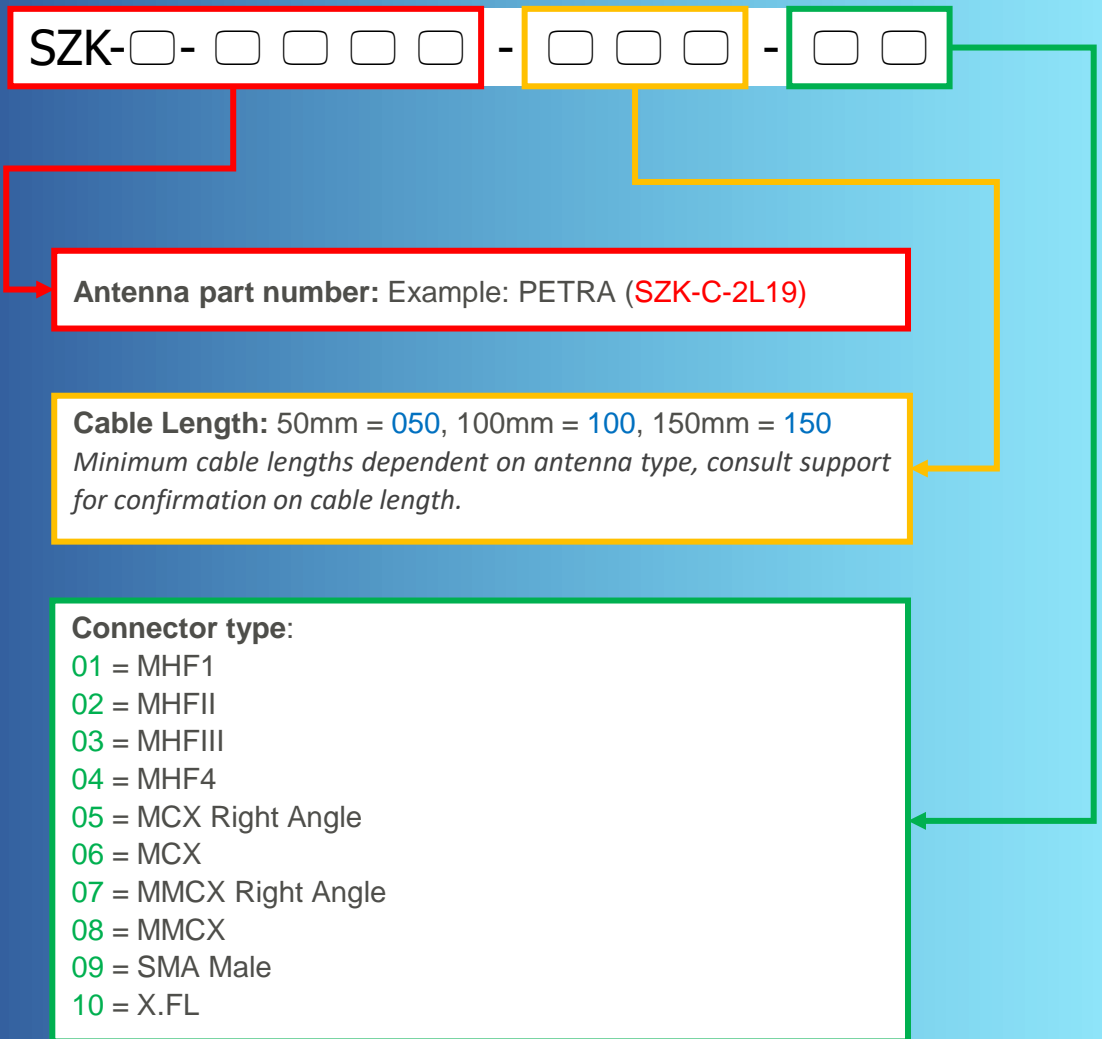
MHF4 | SMD Mount Receptacle

	Part No. / Name	Size (mm)	Frequency (MHz)	Efficiency Avg (%)	Peak Gain (dBi)
	SZT-04	MHF4	PCB	50R	PCB Mount

Flexible Antenna Cable + Connector Part Number Selection

For FPC antennas custom cable length and connectors are available.

Ask synzen for details or use our guide to know the part number for the product you need.



FPC (Flexible Printed Circuit) antennas require the right cable length and connectors to ensure optimal performance. We understand this and offers custom cable lengths and different RF connectors to meet the specific needs of their customers. This service allows customers to get the exact cable length and connector type they need for their FPC antenna.

Having the right cable length and connector type is crucial for ensuring optimal performance of an FPC antenna. Synzen's ability to provide custom cable lengths and different RF connectors is a valuable service that helps meet the unique needs of their customers. This service can help ensure the best possible performance of FPC antennas in a variety of applications.



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