INDUSTRY GUIDE 2022

IoT, M2M & Smart Meters

A summarised technical overview for various antennas in our IoT, M2M & Smart Meters range

POYNTING

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COMPANY OVERVIEW

POYNTING

THE COMPANY

Poynting Antennas designs, manufactures and sells cellular antenna products and related equipment mainly to the telecommunications, broadcasting and related industries.

Established in 1990, Poynting has grown to become one of the leading antenna manufacturers in South Africa.

Poynting exists for advancing antenna applications: its name is derived from the Poynting vector, a directional measure of energy in an electromagnetic field.

Poynting was founded on the deep knowledge and understanding of the principles of electromagnetics, RF propagation, antenna design and development.

Poynting employees include graduate as well as professionally registered engineers with PhD doctorate level expert knowledge of the technology and the industry. Poynting has a legacy of innovative design and delivery with customers and partners worldwide.

FOOTPRINT

Apart from South Africa, roughly 80% of total sales are International with the main markets being Europe, USA, Canada and Australia. International sales are fulfilled through long-standing distribution partners.

COMMITMENT TO QUALITY

Poynting Antennas (Pty) Ltd is dedicated to ensure that its products and services fully meet the requirements of its customers at all times.

Poynting has a legacy of innovation, design and fulfilment, taking pride in its solid ethical approach. Innovation and creative independence, team spirit and continual learning ensures the organisation can respond to challenges with agility.

INNOVATION

Poynting holds extensive Intellectual Property (IP) with over 50 registered designs, patents and trademarks filed to differentiate our products from competitive offerings.
Poynting R&D is constantly on the edge of novel innovation.

OPERATIONS

With production facilities in Samrand, South Africa (for specialised and unique products), Poynting has established satellite manufacturing facilities in Shenzhen China (90% of all antenna productions) with strict quality and manufacturing metrics to ensure the integrity of product performance. International logistics and high volume supply are further streamlined from Shenzhen, China.

INTERNATIONAL SALES AND BUSINESS DEVELOPMENT

Poynting has embarked on a long term strategy to expand its reach into the international arena. Poynting opened its office with full representation in Germany focusing on deepening the approach in Europe, Scandinavia and Eastern Europe.

In April 2021 we opened offices and a warehouse in the USA and with this expansion Poynting will be able to accelerate our growth and take on the huge demand for broadband antennas in the region.

Poynting is continuously improving – a careful and selective approach for growth in new markets and regions. We seek to promote our products and solutions worldwide and therefore seek distributors in regions where our market share is still small. Servicing new customers better, expanding the business in "undiscovered" regions with new and exciting products.

POYNTING - BEYOND A CONNECTED LIFE

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IoT; M2M & SMART METERS

POYNTING

Internet of Things (IoT) and Machine-to-machine (M2M) devices are often placed in areas with bad signals. Think of Smart Meters that are housed in metal boxes, IoT devices that are used in factories or M2M units that are placed in the basement of an office block. Reliable communication will make or break the usability of your solution, therefore a good antenna is essential.

Poynting Antennas has a wide variety of fit for purpose antennas solutions for IoT, M2M and smart metering applications.

These include antennas for smart utilities (smart power metering, gas and water), smart buildings, digital signage, smart environmental and water systems, warehouse and logistic systems, industrial automation as well as farming and agricultural M2M and IoT.

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DASH-1

Primary Industry: IoT, M2M & Smart Meters; Farming & Agricultural
Secondary Industry: Commercial & Industrial; Urban & Rural; Mining & Tunnelling

Frequency:	698-960; 1710-2170; 2300-2700 MHz
Max Gain:	4dBi
Radiation Pattern:	Omni-Directional
MIMO:	SISO
Size (LxWxD):	258mm x 34mm x 13mm

DASH-3

Primary Industry: IoT, M2M & Smart Meters; Farming & Agricultural
Secondary Industry: Commercial & Industrial; Urban & Rural; Mining & Tunnelling

Frequency:	400-510 MHz
Max Gain:	1dBi
Radiation Pattern:	Omni-Directional
MIMO:	SISO
Size (LxWxD):	258mm x 34mm x 13mm

DIPL-1

Primary Industry: IoT, M2M & Smart Meters; Farming & Agricultural
Secondary Industry: Commercial & Industrial; Urban & Rural; Mining & Tunnelling

Frequency:	824-960; 1710-2200 MHz
Max Gain:	1dBi
Radiation Pattern:	Omni-Directional
MIMO:	SISO
Size (LxWxD):	160mm x 26mm x 10mm

OMNI-85

Primary Industry: Urban & Rural; IoT, M2M & Smart Meters; Farming & Agricultural
Secondary Industry: Commercial & Industrial

Frequency:	617-960; 1427-1517; 1710-2700; 3400-3800 MHz (Band 71-US Specific)
Max Gain:	4dBi
Radiation Pattern:	Omni-Directional
MIMO:	SISO
Size (LxWxD):	209mm x 31mm x Ø13mm

OMNI-121

Primary Industry: Commercial & Industrial; Urban & Rural; IoT, M2M & Smart Meters; Farming & Agricultural
Secondary Industry: Mining & Tunnelling

Frequency:	698-960; 1710-2170; 2300-2700 MHz
Max Gain:	6dBi
Radiation Pattern:	Omni-Directional
MIMO:	SISO
Size (LxWxD):	590mm x 80mm x 55mm

OMNI-214

Primary Industry: IoT, M2M & Smart Meters; Commercial & Industrial; Urban & Rural
Secondary Industry: Farming & Agriculture

Frequency:	617-960; 1427-1517; 1710-2700; 3400-3800 MHz (Band 71-US Specific)
Max Gain:	4dBi
Radiation Pattern:	Omni-Directional
MIMO:	4X4 MIMO
Size (LxWxD):	646mm x Ø71mm

OMNI-297

Primary Industry: Commercial & Industrial; Mining & Tunnelling; IoT, M2M & Smart Meters; Farming & Agricultural

Frequency:	617 – 960; 1427 – 1517; 1710 – 2700; 3400 – 3800 MHz (Band 71- US Specific)
Max Gain:	2dBi
Radiation Pattern:	Omni-Directional
MIMO:	SISO
Size (LxWxD):	150mm x Ø70mm

OMNI-280

Primary Industry: Urban & Rural; IoT, M2M & Smart Meters; Farming & Agricultural
Secondary Industry: Commercial & Industrial

Frequency:	617-960; 1427-1517; 1710-2700; 3400-3800 MHz (Band 71-US Specific)
Max Gain:	4dBi
Radiation Pattern:	Omni-Directional
MIMO:	SISO
Size (LxWxD):	157mm x 61mm x 44mm

OMNI-300

Primary Industry: IoT, M2M & Smart Meters; Commercial & Industrial; Urban & Rural
Secondary Industry: Farming & Agricultural

Frequency:	868 – 930 MHz
Max Gain:	4.5dBi
Radiation Pattern:	Omni-Directional
MIMO:	SISO
Size (LxWxD):	553mm x Ø50mm

OMNI-510

Primary Industry: Transport & Mobility; Marine & Coastal; IoT, M2M & Smart Meters; Farming & Agricultural
Secondary Industry: Commercial & Industrial; Urban & Rural; Mining & Tunnelling

Frequency:	698-960; 1710-2170; 2300-2700 MHz
Max Gain:	2dBi
Radiation Pattern:	Omni-Directional
MIMO:	SISO
Size (LxWxD):	135mm x 20mm x 10mm

PUCK-1

Available in White

Primary Industry: Transport & Mobility; Marine & Coastal; Commercial & Industrial; Mining & Tunnelling; IoT, M2M & Smart Meters; Farming & Agricultural

Frequency:	698-960; 1710-2700; 3200-3800 MHz
Max Gain:	6dBi
Radiation Pattern:	Omni-Directional
MIMO:	SISO
Size (LxWxD):	Ø99.3mm x 36mm

PUCK-2

Available in White

Primary Industry: Transport & Mobility; Marine & Coastal; Commercial & Industrial; Mining & Tunnelling; IoT, M2M & Smart Meters; Farming & Agricultural

Frequency:	698-960; 1710-2700; 3200-3800 MHz
Max Gain:	6dBi
Radiation Pattern:	Omni-Directional
MIMO:	2X2 MIMO - 2-in-1 Antenna: 2 x LTE
Size (LxWxD):	Ø99.3mm x 36mm

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PUCK-4

Primary Industry: Transport & Mobility; Marine & Coastal; Commercial & Industrial; Mining & Tunnelling; IoT, M2M & Smart Meters; Farming & Agricultural

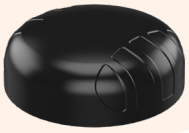
Frequency:	698-960; 1710-2700; 3200-3800 MHz
Max Gain:	6dBi
Radiation Pattern:	Omni-Directional
MIMO:	2X2 MIMO - 3-in-1 Antenna: 2 x LTE, 1 x GPS
Size (LxWxD):	Ø99.3mm x 36mm

PUCK-5

Primary Industry: Transport & Mobility; Marine & Coastal; Commercial & Industrial; Mining & Tunnelling; IoT, M2M & Smart Meters; Farming & Agricultural

Frequency:	698-960; 1710-2700; 3200-3800; 5000-6000 MHz
Max Gain:	7.5dBi
Radiation Pattern:	Omni-Directional
MIMO:	2X2 MIMO - 5-in-1 Antenna: 2 x LTE, 2 x Wi-Fi, 1 x GPS
Size (LxWxD):	Ø99.3mm x 36mm

PUCK-7



Primary Industry: Transport & Mobility; Marine & Coastal; Commercial & Industrial; Mining & Tunnelling; IoT, M2M & Smart Meters; Farming & Agricultural

Frequency:	698-960; 1710-2700; 3200-3800; 5000-6000 MHz
Max Gain:	7.5dBi
Radiation Pattern:	Omni-Directional
MIMO:	2X2 MIMO - 4-in-1 Antenna: 2 x LTE, 2 x Wi-Fi
Size (LxWxD):	Ø99.3mm x 36mm

PUCK-8

Primary Industry: Transport & Mobility; Marine & Coastal; Commercial & Industrial; Mining & Tunnelling; IoT, M2M & Smart Meters; Farming & Agricultural

Frequency:	698-960; 1710-2700; 3200-3800; 5000-6000 MHz
Max Gain:	7.5dBi
Radiation Pattern:	Omni-Directional
MIMO:	2X2 MIMO - 3-in-1 Antenna: 2 x LTE, 1 x Wi-Fi
Size (LxWxD):	Ø99.3mm x 36mm

PUCK-12

Primary Industry: Transport & Mobility; Marine & Coastal; Commercial & Industrial; Mining & Tunnelling; IoT, M2M & Smart Meters; Farming & Agricultural

Frequency:	2400-2500; 5000-6000 MHz
Max Gain:	7.5dBi Wi-Fi
Radiation Pattern:	Omni-Directional
MIMO:	2X2 MIMO - 2-in-1 Antenna: 2 x Wi-Fi
Size (LxWxD):	Ø99.3mm x 36mm

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