SilverNet
WIRELESS-NETWORK-SOLUTIONS

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Pro Range GEN 5

SIL-MICRO
SIL-LITE
SIL-BASE

MICRO

BASE

LITE

5GHz – 6.4GHz Wireless Links

OVERVIEW

The PRO Range Gen 5 is a class leading outdoor wireless transmission system that is designed to be easy to install and is extremely compact and rugged.

The PRO range is ideal for connecting networks in distant buildings and is perfect for use with CCTV and VoIP transmission due to ultra-low latency (below 5ms).

Using the latest technologies the Gen 5 PRO Range can achieve amazingly high stable throughput capacities due to its more advanced modulation (**4096-QAM**) providing a significant leap forward in wireless technology, offering faster speeds, greater capacity, and improved performance with Advanced Encryption Standard (**AES 256+**) approved for use to protect Government Classified Information.

Features

- **Point-to-Point** up to 2 & 6KM with Integrated Antenna or further with external
- Up to **2.5 Gbps** data Throughput
- **Point-to-MultiPoint** with TDMA
- External Omni or Sector Antenna (BASE)
- Rugged case design for outdoor applications
- SNMP
- AES Encryption up to 256bit
- MU-MIMO with Spatial Multiplexing
- 4096-QAM (Quadrature Amplitude Modulation)
- DFS (Dynamic Frequency Selection)
- TPC (Transmit Power Control)
- PoE 802.3af
- WEB Management
- Surge protected radio and PSU
- Rugged mounting brackets
- SilverView Network Management Software
- 2 Year warranty (Extendable to 5 Years)

Distributed By:

Technical Specifications

PRO Range GEN 5	SIL-BASE (Multipoint single radio)	SIL-MICRO-PCP (up to 2km paired Link)	SIL-LITE-PCP (up to 6km paired Link)
Radio Specification			
Transmission rate	11be: Up to 5.76Gbps, 11ac: Up to 1.3Gbps, 11n: Up to 300Mbps, 11a Backwards Compatible		
MIMO	2x2 Spatial Multiplexed Streams		
Throughput	Up to 2.5Gbps		
Standards	IEEE802.11be, IEEE802.11ac, IEEE802.11n, IEEE802.11a		
Channel Size	20/40/80/160/320MHz (country use dependent)		
Channel (Country Dependent)	USA (FCC): 5.15GHz - 5.825GHz Europe (ETSI): 5.47GHz - 6.425GHz UK and EU Band B: 5.47GHz - 5.725GHz UK and EU Band C: 5.725GHz – 5.850GHz UK and EU Band D: 5.925GHz – 6.425GHz		
Operating frequency	5.125GHz - 6.425GHz		
RF output power	Up to 26dBm from ports		
Operating Mode	AP WDS, Client WDS and Bridge		
Antenna	2 x Ntype female Sockets (H+V) Optional – 120/90 Sector antenna or 12dBi Dual polarised Omni	16dBi Integrated Dual polarised Antenna (H+V)	20dBi Integrated Dual polarised Antenna (H+V)
Horizontal/ Vertical BW	N/A	35° x 35°	20° x 20°
Security - Network			
802.1x, Radius, QoS, Vlan	Supports 802.1x Client and Server and Supports Radius Client, 802.11i, Asymmetric Bandwidth Control, 802.1Q: Management, trunk, access and transparent mode		
Wireless Security	Supports Over-The-Air (OTA), AES+ 256 Encryption		
Electrical – Interface			
LAN/WAN	1 x 2.5 Gigabit Ethernet 1 x 2.5 Gbps SFP+		
Power	6 watts (typical), 16 watts (max) DC 9~56 Volt or POE 802.11af/at (PoE injector included in kit 100-240vac)		
Surge Protection	4KV		
Management			
Remote Connection	Web, Telnet, ssh, SilverView Monitoring		
SNMP	SNMP V2/V3		
Firmware	Upgradeable via web		
Physical			
Dimensions Unpacked radio	17 x 14 x 5.2 (cm) each	17 x 14 x 5.2 (cm) each	24.5 x 22.3 x 6.3 (cm) each
Weight Unpacked radio	0.790 Kg Each	0.765 Kg Each	1.170 Kg Each
Wind Loading @ 80MPH	7.4Nm	7.4Nm	17.25Nm
Dust and Waterproof	IP67 Certified with Moisture Vent		
Mounting Bracket	Wall / Pole Mountable (SIL MNT3 Kit Included)		
Environment			
Operating Temperature	-20~60℃ (Storage -40~90℃)		
Humidity	0～95 ﹪ (non-condensing)		
Other			
Warranty	2 Year Parts and labour (extendable to 5 Years)		
MTBF	60000 Hrs		
Pack Contents	1x Radio, 1 x POE injector, 1 x Mounting bracket set	2x Radios, 2 x POE injector, 2 x Mounting bracket sets	2x Radios, 2 x POE injector, 2 x Mounting bracket sets

Note: Remove the PCP from the part code for a single unit kit.

Included Accessories Specifications
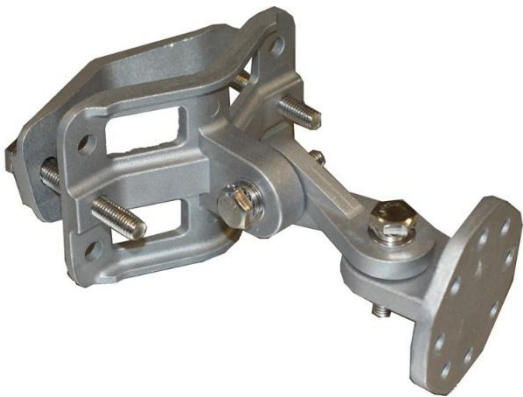
SIL MNT3
3 Axis Mounting bracket

OVERVIEW

The SIL MNT3 bracket has a 3 Axis Tilt and Swivel mechanism that enables precise alignment of the MICRO or LITE radio, while the notches engraved on the metal allows the bracket to hold firm when you reach the best signal.

It can be fitted to either a wall, a 3" (75mm) pole or paired with banding strap to fit to larger columns.

Specifications

Part No.	SIL MNT3
Physical	
Dimensions	150* x 111 x 75 mm (L x W x H)
Weight	415 g
Wind Load @ 80MPH	1.4Nm
Axis Rotation	Vertical: +/- 45° Horizontal: +/- 90°
Mounting	Wall or Pole mount up to 75 mm

SIL 48G POE+
Single Port PoE Injector

OVERVIEW

The SIL 48G PoE+ is a Single Port Gigabit PoE injector which can carry power to devices such as: IP Cameras, Wireless Access Points, VoIP Phones and much more. Providing an alternative to upgrading existing switches to PoE enabled devices.

With quick and easy plug and play, you can rapidly enable PoE devices on your network.

Specifications

Part No.	SIL 48G POE+
Physical	
Dimensions	Dimensions:62mm(W) x 38.5mm(H) x 165mm(L)
Weight	185 g
Operating temperature	(0°C ~+40°C)
Output	802.3af/at up to 30w
Input Voltage	110~240VAC
Mounting	Can be screwed to a wall or board

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Antenna Examples

Point to Point
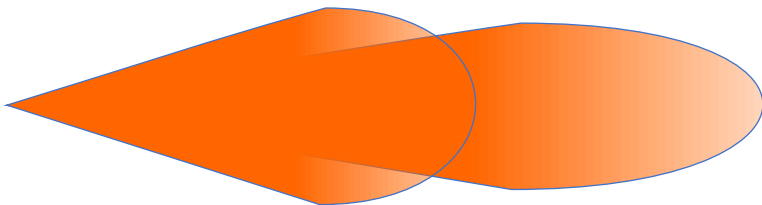
MICRO 35°
≤ 2km

LITE 20°
≤ 6km

Point to Multipoint

Beam Patterns

90° Sector
≤ 5km

360° Omni
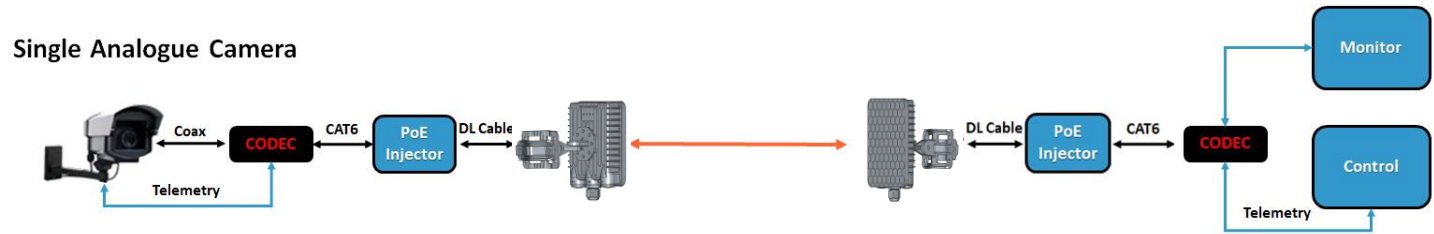≤ 3km
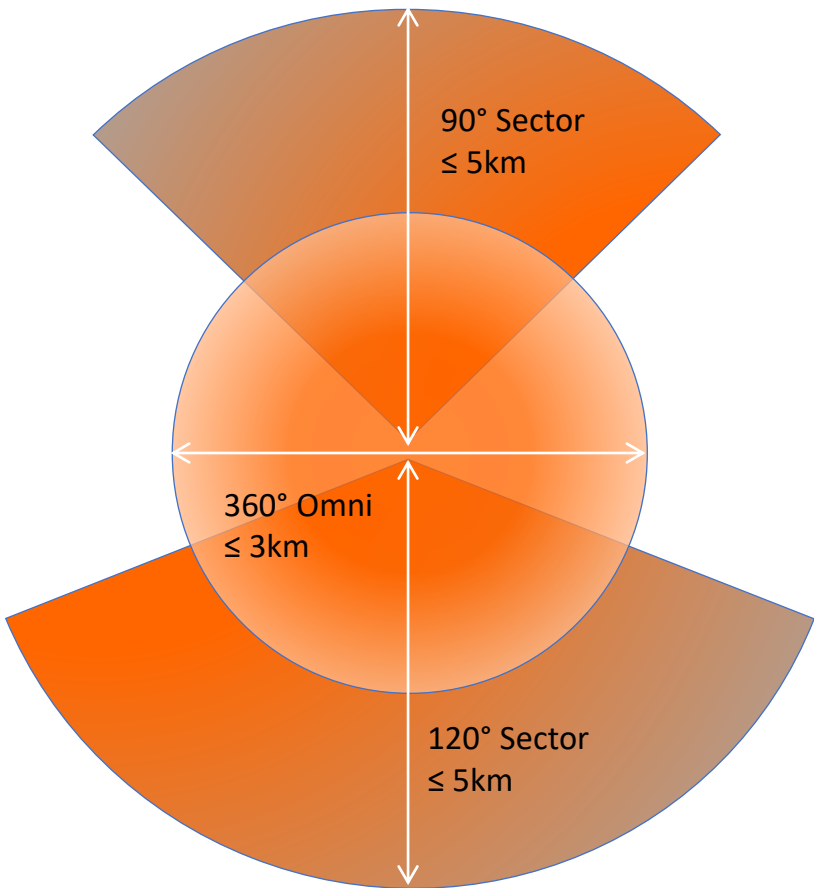
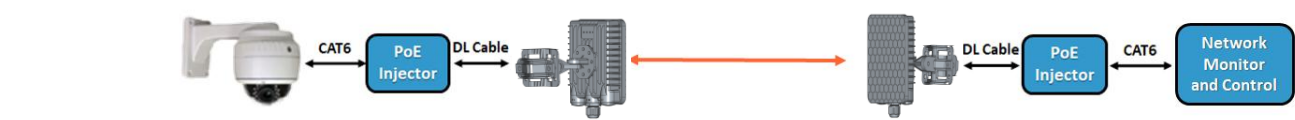120° Sector
≤ 5km

Antenna System Options

90°

120°
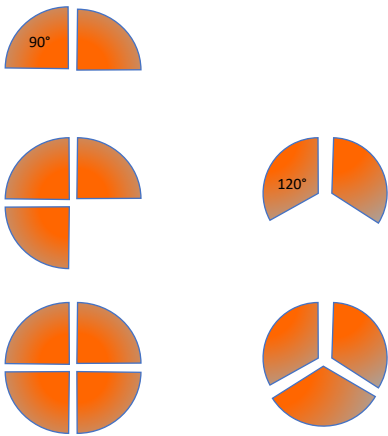
NOTES:

The **SIL BASE** can be fitted with either;

- External 12dBi Omni Antenna (≤3km)
- External 20dBi 90° Sector Antenna (≤5km)
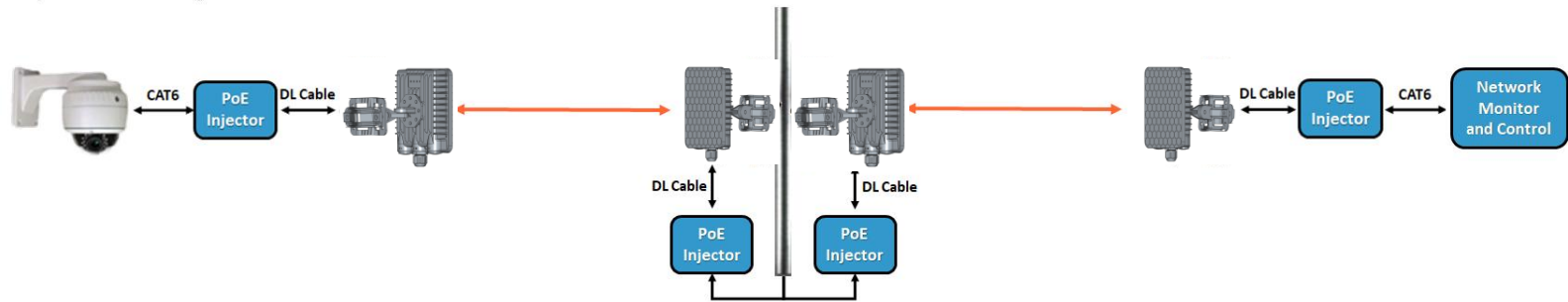- External 19dBi 120° Sector Antenna (≤5km)
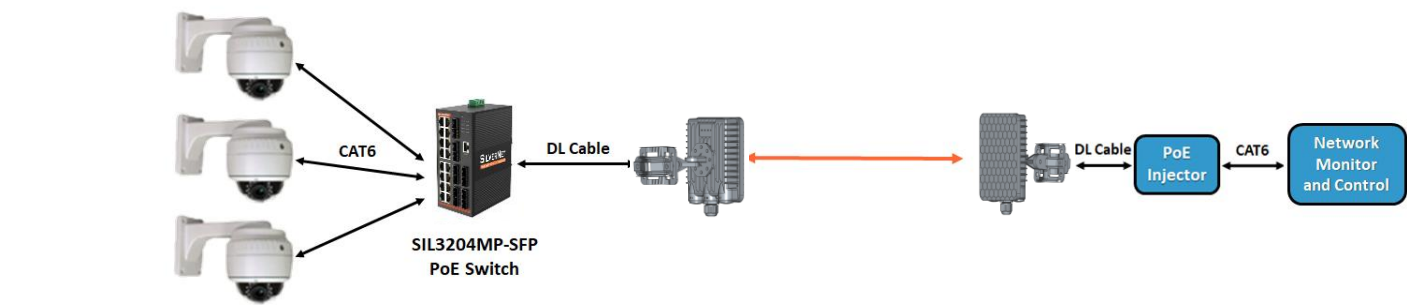
Point to Point

Single Analogue Camera

Coax — CODEC — CAT6 — PoE Injector — DL Cable ←→ ←→ DL Cable — PoE Injector — CAT6 — CODEC ←→ Monitor / Control

Telemetry

Single IP Camera

CAT6 — PoE Injector — DL Cable ←→ ←→ DL Cable — PoE Injector — CAT6 — Network Monitor and Control

Repeater for Single IP Camera

CAT6 — PoE Injector — DL Cable ←→ ←→ DL Cable ←→ ←→ DL Cable — PoE Injector — CAT6 — Network Monitor and Control

DL Cable — PoE Injector | DL Cable — PoE Injector

Multiple Camera Point to Point

CAT6 — SIL3204MP-SFP PoE Switch — DL Cable ←→ ←→ DL Cable — PoE Injector — CAT6 — Network Monitor and Control
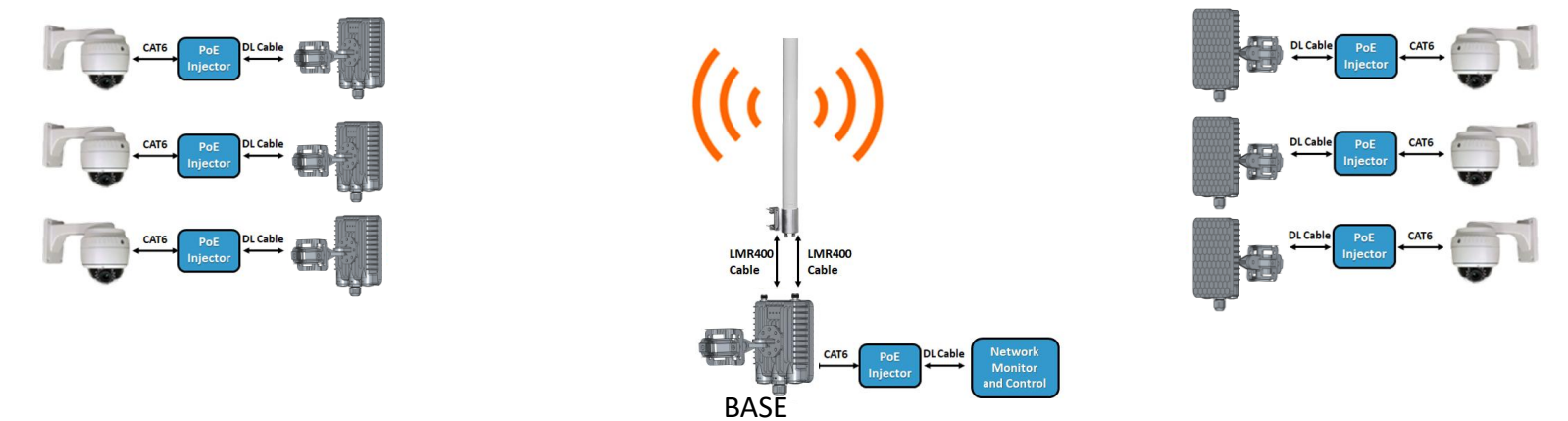
Part Code	Description
SIL-MICRO-PCP	2.5Gbps up to 2km with built in dual polarised antenna.
SIL-LITE-PCP	2.5Gbps up to 6km with built in dual polarised antenna.

Point to Multi-Point

Point to Multipoint with Base 500-90 and Relay with Backhaul
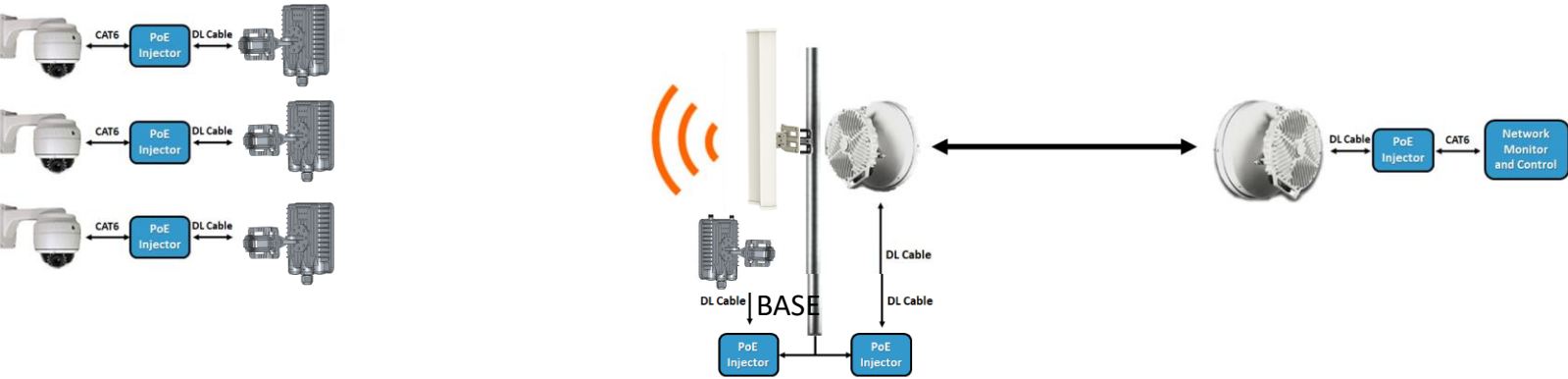
Point to Multipoint with Omni Antenna

Multipoint Base

Part Code	Description
SIL-BASE	Multipoint base, up to 2.5Gbps with 2 x Ntype connectors for external antenna.

Multipoint Clients

Part Code	Description
SIL-MICRO	2.5Gbps up to 2km single radio with built in dual polarised antenna.
SIL-LITE	2.5Gbps up to 6km single radio with built in dual polarised antenna.

Long Range Point to Point

Long Range Point to Point with Dish Antenna

Long Range Point to Point with Grid Dish Antenna

Part Code	Description
SIL-BASE DAN 5829	Long range point to point link with 29dBi dish antenna. Includes 2 x radio, 2 x PoE injector PSU, 2 x tilt and swivel bracket, 2 x Ntype to Ntype cables.
SIL-BASE DAN 5832	Long range point to point link with 32dBi dish antenna. Includes 2 x radio, 2 x PoE injector PSU, 2 x tilt and swivel bracket, 2 x Ntype to Ntype cables.
SIL-BASE DAN 5834	Long range point to point link with 34dBi dish antenna. Includes 2 x radio, 2 x PoE injector PSU, 2 x tilt and swivel bracket, 2 x Ntype to Ntype cables.
SIL-BASE GAN 5824	Long range point to point link with 24dBi grid antenna. Includes 2 x radio, 2 x PoE injector PSU, 2 x tilt and swivel bracket, 2 x Ntype to Ntype cables.
SIL-BASE GAN 5829	Long range point to point link with 29dBi grid antenna. Includes 2 x radio, 2 x PoE injector PSU, 2 x tilt and swivel bracket, 2 x Ntype to Ntype cables.

PRO Range Antennas & Cables
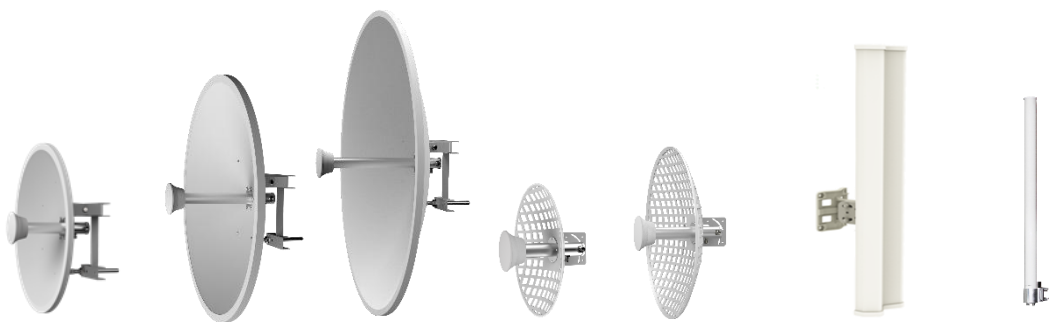
	Dish Antenna			Grid Antenna		Sector Antenna	Omni Antenna
	DAN5829	DAN5832	DAN5834	GAN5824	GAN5829	SAN5819-120	OAN5812
Frequency	4.9-6.0GHz	4.9-6.0GHz	4.9-6.0GHz	4.9-6.0GHz	4.9-6.0GHz	4.9-6.0GHz	4.9-6.0GHz
Gain	29dBi	32dBi	34dBi	24dBi	29dBi	19dBi	12dBi
Horizontal Beamwidth	6°	4°	3°	9°	6°	120°(6dB)	360°
Vertical Beamwidth	6°	4°	3°	9°	6°	4°	7°
Max VSWR	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
F/B Ratio	>35dB	>35dB	>38dB	N/A	N/A	>25dB	N/A
Wind Loading	125 mph	125 mph	125 mph	150 mph	150 mph	150 mph	150 mph
Polarisation	Dual Polarisation	Dual Polarisation	Dual Polarisation	Dual Polarisation	Dual Polarisation	Dual Polarisation	Dual Polarisation
Connectors	2*N-type Female	2*N-type Female	2*N-type Female	2*N-type Female	2*N-type Female	2*N-type Female	2*N-type Female
Dimensions (mm)	ø600	ø950	ø1250	ø400	ø600	700*133*57	590*110*73
Weight (kg)	6.15	7	11.5	4.2	5.4	2.1	1.8
Certification	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS	CE, RoHS

Part Code	Description
SIL 4CAB 1M X2	LMR 400 Cable 1M with Ntype to Ntype Male Connector x2 cables
SIL 4CAB 2M X2	LMR 400 Cable 2M with Ntype to Ntype Male Connector x2 cables
SIL 4CAB 4M X2	LMR 400 Cable 4M with Ntype to Ntype Male Connector x2 cables
SIL 4CAB 8M X2	LMR 400 Cable 8M with Ntype to Ntype Male Connector x2 cables