Siretta

inspired wireless technology







» Cellular Modems

» Antenna Systems

» RF Cable Assemblies

» RF Adaptors & Connectors

*Advanced Wireless Products*

Siretta
inspired wireless technology

*Siretta*

# DESIGN, MANUFACTURE &SUPPLY

the widest range of quality antennas for the electronics market along with best range of industrial modems under one name. All at a competitive price point and with solid expertise to offer our customers..





We now supply some of the largest wireless customers with antennas, cables and M2M modems – many built to customer specification in conjunction with detailed design advice.

With 20 years' experience in the wireless M2M telemetry market, we design and supply to customer's applications on a global basis. We focus on frequencies within the 76MHz to 5.8GHz range encompassing HF, VHF, ISM, GSM/ GPRS, 3G/UMTS, 4G/LTE, and GPS frequencies.






## *Advanced Design Products*

To meet the increasing need for wireless M2M connection, Siretta offer a range of technically advanced 2G / 3G / 4G modems, providing solutions for a wide range of applications. Designed and manufactured by us, we have taken customer requests and turned these into cutting edge, finished product modems for the 2G / 3G / 4G networks.




The functionality within the ZEST, ZETA, ZOOM, ZULU and ZEUS is significantly more advanced than most other modem manufacturers today, delivering excellent technical performance and great value for money.

Similarly, we have also have a range of 2G / 3G signal testers to help evaluate signal strength and antenna performance in the field. These are now used by many people and organisations for evaluating and datalogging reception of 2G and 3G networks in specific locations.





## *Customer Services*

At Siretta we have a dedicated team of design engineers all available to help customise our products to your needs. Our experienced technical and sales staff are all contactable at our offices in Reading UK to discuss your application, requirements and suitable solution.

For more information contact:

+44 (0)118 976 9014

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# *About Modems and Testers*

Machine to machine (M2M) connectivity and the 'Internet-of-Things' is dramatically changing the way that equipment and remote devices communicate, bringing wide reaching benefits in system function and efficiency. Wireless modems are at the heart of this revolution, enabling almost any application or device to become wireless, and in doing so reap the amazing benefits that M2M connectivity can offer.

Siretta is a leading supplier of wireless modems, offering a broad selection of products for this exciting market development. Fully designed and developed in house, we have taken our many years of wireless experience and produced a range of cutting edge products, offering excellent technical performance and great value for money.



The functionality within our modems is some of the most advanced on the market today, with a multi-level product range providing innovative solutions for all sectors and applications. From the entry level ZEST to the powerful Ethernet enabled ZEUS, our products combine ease of use and advanced features, with robust reliable performance for the most demanding of environments. With the added benefit of local design and engineering support from our UK office, Siretta is your ideal wireless connectivity partner.

## ZEST

- Low Cost
- 2G / 3G
- Compact
- Essential features



Entry level modem offering RS232 / USB connectivity for the GPRS / UMTS networks.

See page 12 for more on the ZEST

## ZETA

- 2G / 3G / 4G
- RS232 interface
- 5-60 input voltage
- GPS option



Fully featured GSM modem, the perfect solution for M2M communication.

See page 13 for more on the ZETA

## ZOOM

- Integratable
- 2G / 3G / 4G
- GPS option
- EVK available



Embedded socket modem via 2x 20-way PCB pin sockets.

See page 14 for more on the ZOOM

## ZULU

- USB / RS232
- DIN rail mounting
- Battery option
- 2G / 3G / 4G
- GPS option
- Battery option



Advanced USB modem with 210 MIPS ARM M4 processor.

See page 15 for more on the ZULU

## ZEUS

- Ethernet interface with webserver
- DIN rail mounting
- 2G / 3G / 4G
- GPS option
- Battery option



Advanced 210 MIPS ARM Cortex M4 processor terminal with 10 Base-T Ethernet port.

See page 16 for more on the ZEUS

## SNYPER

- 2G / 3G
- Summary screen
- Large LCD
- USB charging
- Rugged case



Cellular signal and network analyser finds the perfect GSM network for your application.

See page 17 for more on the SNYPER

## ZOOM-EVK

- RS232 Port
- USB Interface
- Power 5v-42v
- GPIO
- Embedded
- ZOOM development platform



Evaluation and development platform for the ZOOM embedded socket modem.

See page 18 for more on the EVK

## ZULU / ZEUS-EVK

- 32 bit ARM Cortex M4
- RS232 Port
- USB / Ethernet Interface
- Power 5v-42v
- GPIO



Evaluation and development platform for the ZULU / ZEUS modems.

See page 19 for more on the EVK

For more information contact:

+44 (0)118 976 9014

# ZEST

*Low Cost 2G / 3G Modem*

- » RS232 and USB* serial port interface
- » Python script for customer application development
- » GPRS EU coverage
- » Dual band 900 / 1800MHz
- » Supply voltage capability 6-18 / 21V
- » AT command driven
- » Wall or DIN rail mountable
- » Compact size
- » 105 grams weight



The ZEST is an entry level industrial cellular modem, with serial RS232 and USB* ports, offering key functionality within a rugged plastic enclosure. The ZEST is ideal for M2M applications requiring a simple but reliable modem for GPRS data connection, using either a standard RS232 or USB* interface. The USB port is used for sending / receiving data, but in addition can be used for supplying power. The ZEST is a dual band GPRS modem providing EU coverage, for the EMEA and APAC regions. Further configurations including global quad band GPRS and 3G / UMTS are also available on request.

Despite its highly competitive price, the ZEST is built to the same exacting standards as the rest of the Siretta modem family. The ZEST will be a popular choice for many situations requiring just GPRS connectivity, and the flexible 6-18V power supply and a -40°C to +85°C operating temperature range allow the product to be used in most industrial applications.

* USB data port is only available on UMTS model.

# ZETA

*Fully Featured 2G / 3G / 4G Modem*

- » RS232 serial port interface
- » USB serial port interface
- » GPRS global coverage
- » GPRS class 10
- » 5 GPIO lines
- » Wide supply voltage capability 5-42 / 60V
- » AT command driven
- » Compact size
- » 101 grams weight




The ZETA range of GPRS modems offer advanced performance at a low cost, with a convenient RS232 interface. The range is suitable for a wide range of applications, and has been extensively tested for robust reliable performance. With an installation base at many large organisations, and in public spaces, the ZETA has built up a solid reputation for low cost, dependable performance over a number of years.

Capable of operating in the most demanding environments, the ZETA modems are ideally suited to M2M applications including remote monitoring and vehicles. A high level of cellular functions in a compact plug 'n' play housing allow simple integration into your system. With its small size and advanced set of features it fits perfectly into a wide range of devices and applications.

# ZOOM

*Embedded 2G / 3G / 4G Socket Modem*

- TTL or RS232 serial port interface
- USB serial port interface
- GPRS or 3G / UMTS global coverage
- Available with GPS receiver
- 10 GPIO lines
- Wide supply voltage capability 5-42V
- AT command driven
- Compact size
- Simple mounting by 2 x 20 way connectors
- EVK development board available



The ZOOM series of GPRS and 3G / UMTS socket modems are fully designed, developed and ready to integrate into your equipment, easily, and with a low overall cost.

The ZOOM series answers the need for an economic, fully functional and tested cellular modem platform that can be easily incorporated into your equipment with little knowledge of modem technology. With a highly plug 'n' play design, the ZOOM offers a common platform across the range, enabling all technologies to be evaluated easily.

The ZOOM socket modems are designed to be plugged onto your own PCB via standard 2 x 20 way connectors. The two connectors incorporate TTL or RS232 interfaces, USB interface, 10 GPIO lines and power. The ZOOM series also has an unusually wide power supply capability of 5-42V, enabling compatibility with a wide range of applications.

# ZULU

*Advanced 2G / 3G / 4G USB Modem with 210 MIPS ARM Processor*

- » USB serial port interface
- » RS232 serial port interface
- » GPRS, 3G / UMTS or 4G / LTE coverage
- » Available with GPS receiver
- » ARM Cortex M4 32bit processor
- » 10 GPIO lines
- » Wide supply voltage capability 5-42V
- » ADC, CAN, 1-wire and I²C interfaces
- » DIN rail mountable
- » 2000mAh battery option
- » EVK development board available
- » Convenient 36 way multi interface connector




The ZULU range of modems are amongst the most advanced and capable available today. The range is available as two main versions - with or without GPS. Further options include a 2000mAh battery and an upgrade of flash memory to a total of 128Mbit. The ZULU range can be used as a simple modem, or with application software within the GPRS / UMTS / LTE module. But its real strength, for the user, is as a comprehensive computing platform using its ARM Cortex M4 32bit processor connected to the wireless engine - all in one package. The ZULU design has been extensively tested and represents amazing value as a GPRS / UMTS / LTE connected powerful 32bit computing device.

The ZULU modems have an ARM Cortex M4 32bit processor as standard, independent of the wireless module, for customers to develop their software on. The ZULU has both USB and RS232 serial ports with 10 GPIO lines as standard. The ZULU is housed in a tough plastic enclosure that is either screw or DIN rail mountable.

# ZEUS

*Advanced 2G / 3G / 4G Ethernet Modem Router*

- » 10/100 Ethernet interface
- » RS232 serial port interface
- » GPRS, 3G / UMTS or 4G / LTE coverage
- » Available with GPS receiver
- » ARM Cortex M4 32bit processor
- » 10 GPIO lines
- » Wide supply voltage capability 5-42V
- » ADC, CAN, 1-wire and I²C interfaces
- » DIN rail mountable
- » 2000mAh battery option
- » EVK development board available
- » Convenient 36 way multi interface connector




The ZEUS range of 3G / UMTS modems are amongst the most advanced and capable modems available today. The range is available as two main versions - with or without GPS. Further options include a 2000mAh battery and an upgrade of flash memory to a total of 128Mbit. The ZEUS range can be used as a simple modem or with application software within the UMTS module. But its real strength, for the user, is as a comprehensive computing platform using its ARM Cortex M4 32bit processor connected to the UMTS engine - all in one package. The ZEUS design has been extensively tested and represents amazing value as a UMTS connected powerful 32bit computing engine.

The ZEUS modems have an ARM Cortex M4 32bit processor as standard, independent of the wireless module, for customers to develop their software on. The ZEUS has an Ethernet port, an RS232 serial port and 10 GPIO lines as standard. The ZEUS is housed in a tough plastic enclosure that is either screw or DIN rail mountable.

# SNYPER

*2G / 3G Cellular Signal and Network Analyser*

- 2G / 3G coverage versions
- Summary feature for consolidated view of network data
- Large easy to read LCD display
- Operates without SIM
- Logical menus and operation
- Long life rechargeable battery
- USB battery charger included
- Rugged and durable construction
- Supplied in a hard carrying case




The SNYPER is a high performance signal and network analyser for the 2G / GPRS and 3G / UMTS networks, with a host of important features for the busy engineer and installer. Building on our many years of signal tester experience, the new SNYPER utilises the same design platform used in our advanced wireless modems to provide market leading performance and functionality, at a highly competitive price.

Used as an invaluable tool for the surveying and commissioning of wireless systems, the SNYPER can perform a number of different functions to determine optimum antenna placement, performance of existing installations or choice of network operator. As an example, the SNYPER can determine the strength of a particular network signal, or can review all available network signals in the area of use, and rank these in order of strength through its summary page. The summary page is an incredibly powerful feature allowing network operator choice to be made based on both signal strength and number of usable cells, with all data visible concurrently. The SNYPER also has a number of signal strength thresholds within the summary page, providing a more concise view where only signals above a certain dB level are of interest.

# ZOOM-EVK Board

*Modem Development for ZOOM*

- » Development platform
- » Plugs directly onto ZOOM module
- » Ideal prototyping kit



The ZOOM-EVK evaluation and development board is the perfect way of getting to know the ZOOM series of socket modems, and building an application for integration into your equipment. The ZOOM modem plugs directly onto the EVK providing convenient access to all of the ZOOM interfaces via the EVK's D-Sub, USB and terminal block connectors. This includes the TTL, RS232 and USB interfaces, allowing you to control the modem from a connected PC or embedded micro controller.

The ZOOM-EVK board comes complete with a multi region power supply, RS232/ USB cables, our Delta 2A GSM antenna and the Mike 3A GPS antenna, providing all the components for a working system - just add your choice of ZOOM modem.

# ZULU / ZEUS-EVK Board

*Modem Development for ZULU / ZEUS*

- » Development platform
- » Includes accessories and antennas
- » Ideal prototyping kit



The ZULU/ZEUS-EVK evaluation and development board is the perfect way of working with the ZULU/ZEUS modems, and developing an application within the ARM Cortex processor. The EVK provides simple and convenient access to the ZULU/ZEUS interfaces through standard D-Sub and terminal block connectors.

The ZULU/ZEUS-EVK board also comes complete with a multi region power supply, 36way interface cable, RS232/USB (ZULU) or RS232/Ethernet (ZEUS) cables, a JTAG programming cable, our Delta 2A GSM antenna and the Mike 3A GPS antenna, providing all the components for a working system - just add your choice of ZULU/ZEUS modem.

# Product Comparison

*Matrix of Siretta Modems*

| | Software | | Interfaces | | | | | | | | | | Frequencies | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | 2G / GPRS | | 3G / UMTS | | | 4G / LTE |
| • Standard Feature<br>o Option | IP Stack | AT Commands | RS232 | USB | Ethernet | TTL | ADC | DAC | CAN | 1-Wire | I2C | GPS | 900 / 1800MHz | 850 / 1900MHz | 850 / 1900MHz | 1700MHz | 900 / 2100MHz | 800 / 1800 / 2600MHz |
| ZEST-N-GPRS (EU) | • | • | • | • | - | - | - | - | - | - | - | - | - | • | - | - | - | - |
| ZEST-N-UMTS (EU) | • | • | • | • | - | - | - | - | - | - | - | - | - | • | - | - | • | - |
| ZETA-N-GPRS | • | • | • | - | - | - | - | - | - | - | - | - | • | • | - | - | - | - |
| ZETA-G-GPRS | • | • | • | - | - | - | - | - | - | - | - | • | • | • | - | - | - | - |
| ZETA-N-UMTS | • | • | • | • | - | - | 1 | - | - | - | - | - | • | • | • | • | • | - |
| ZETA-G-UMTS | • | • | • | • | - | - | 1 | - | - | - | - | • | • | • | • | • | • | - |
| ZOOM-N-GPRS | • | • | - | • | - | • | 1 | - | - | - | - | - | • | • | - | - | - | - |
| ZOOM-G-GPRS | • | • | - | • | - | • | 1 | - | - | - | - | • | • | • | - | - | - | - |
| ZOOM-N-UMTS | • | • | - | • | - | • | 1 | - | - | - | - | - | • | • | • | • | • | - |
| ZOOM-G-UMTS | • | • | - | • | - | • | 1 | - | - | - | - | • | • | • | • | • | • | - |
| ZOOM-N-GPRS-RS232 | • | • | • | • | - | - | 1 | - | - | - | - | - | • | • | - | - | - | - |
| ZOOM-G-GPRS-RS232 | • | • | • | • | - | - | 1 | - | - | - | - | • | • | • | - | - | - | - |
| ZOOM-N-UMTS-RS232 | • | • | • | • | - | - | 1 | - | - | - | - | - | • | • | • | • | • | - |
| ZOOM-G-UMTS-RS232 | • | • | • | • | - | - | 1 | - | - | - | - | • | • | • | • | • | • | - |
| ZULU-N-GPRS | • | • | • | • | - | - | 2 | 2 | • | • | • | - | • | • | - | - | - | - |
| ZULU-G-GPRS | • | • | • | • | - | - | 2 | 2 | • | • | • | • | • | • | - | - | - | - |
| ZULU-N-UMTS | • | • | • | • | - | - | 2 | 2 | • | • | • | - | • | • | • | • | • | - |
| ZULU-G-UMTS | • | • | • | • | - | - | 2 | 2 | • | • | • | • | • | • | • | • | • | - |
| ZULU-N-LTE (EU) | • | • | • | • | - | - | 2 | 2 | • | • | • | - | • | • | - | - | • | • |
| ZULU-G-LTE (EU) | • | • | • | • | - | - | 2 | 2 | • | • | • | • | • | • | - | - | • | • |
| ZEUS-N-GPRS | • | • | • | - | • | - | 2 | 2 | • | • | • | - | • | • | - | - | - | - |
| ZEUS-G-GPRS | • | • | • | - | • | - | 2 | 2 | • | • | • | • | • | • | - | - | - | - |
| ZEUS-N-UMTS | • | • | • | - | • | - | 2 | 2 | • | • | • | - | • | • | • | • | • | - |
| ZEUS-G-UMTS | • | • | • | - | • | - | 2 | 2 | • | • | • | • | • | • | • | • | • | - |
| ZEUS-N-LTE (EU) | • | • | • | - | • | - | 2 | 2 | • | • | • | - | • | • | - | - | • | • |
| ZEUS-G-LTE (EU) | • | • | • | - | • | - | 2 | 2 | • | • | • | • | • | • | - | - | • | • |

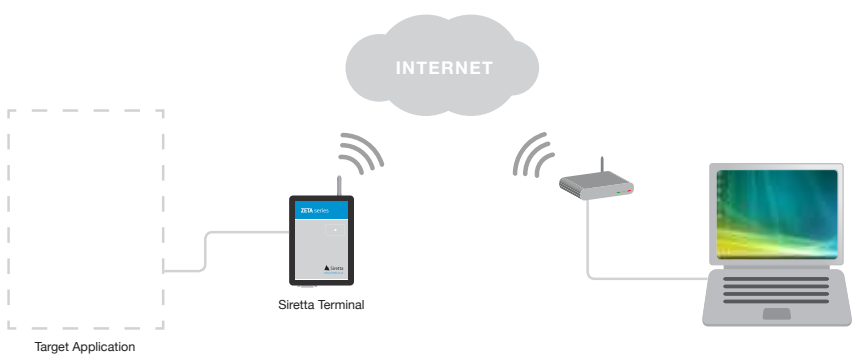
* Only with battery option fitted

| GPIO | | | | | Other | | | | | Power | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ARM Cortex M4 Processor | GPIO (Input/Output) | GPIO Input Voltage | GPIO Output Voltage | 0.6A Relay | Dimensions L x H x D (mm) | Weight | Accelerometer | Operating Temperature | DIN Rail Mounting | Power Supply | 2000mAh Battery | USB Charging * |
| - | - | - | - | - | 75 x 85 x 28 | 105g | - | -40 to 80˚C | • | 6-18V | - | - |
| - | - | - | - | - | 75 x 85 x 28 | 105g | - | -40 to 80˚C | • | 6-18V | - | - |
| - | 5 | 35V | 3.3V | - | 93 x 67 x 28 | 101g | - | -40 to 85˚C | - | 5-60V | - | - |
| - | 5 | 35V | 3.3V | - | 93 x 67 x 28 | 101g | - | -40 to 85˚C | - | 5-60V | - | - |
| - | 5 (4/1) | 35V | 0-42V | - | 93 x 67 x 28 | 101g | - | -30 to 80˚C | - | 5-60V | - | - |
| - | 5 (4/1) | 35V | 0-42V | - | 93 x 67 x 28 | 105g | - | -30 to 80˚C | - | 5-60V | - | - |
| - | 10 (4/6) | 3.3V | 3.3V | - | 85 x 60 x 24 | 54g | - | -30 to 80˚C | - | 5-42V | - | - |
| - | 10 (4/6) | 3.3V | 3.3V | - | 85 x 60 x 24 | 54g | - | -30 to 80˚C | - | 5-42V | - | - |
| - | 10 (4/6) | 3.3V | 3.3V | - | 85 x 60 x 24 | 54g | - | -30 to 80˚C | - | 5-42V | - | - |
| - | 10 (4/6) | 3.3V | 3.3V | - | 85 x 60 x 24 | 54g | - | -30 to 80˚C | - | 5-42V | - | - |
| - | 10 (4/6) | 3.3V | 3.3V | - | 85 x 60 x 24 | 54g | - | -30 to 80˚C | - | 5-42V | - | - |
| - | 10 (4/6) | 3.3V | 3.3V | - | 85 x 60 x 24 | 54g | - | -30 to 80˚C | - | 5-42V | - | - |
| - | 10 (4/6) | 3.3V | 3.3V | - | 85 x 60 x 24 | 54g | - | -30 to 80˚C | - | 5-42V | - | - |
| - | 10 (4/6) | 3.3V | 3.3V | - | 85 x 60 x 24 | 54g | - | -30 to 80˚C | - | 5-42V | - | - |
| • | 9 (5/4) | 35V | 0-42V | • | 134 x 74 x 33 | 125g | • | -30 to 80˚C | • | 5-42V | o | • |
| • | 9 (5/4) | 35V | 0-42V | • | 134 x 74 x 33 | 125g | • | -30 to 80˚C | • | 5-42V | o | • |
| • | 9 (5/4) | 35V | 0-42V | • | 134 x 74 x 33 | 125g | • | -30 to 80˚C | • | 5-42V | o | • |
| • | 9 (5/4) | 35V | 0-42V | • | 134 x 74 x 33 | 125g | • | -30 to 80˚C | • | 5-42V | o | • |
| • | 9 (5/4) | 35V | 0-42V | • | 134 x 74 x 33 | 125g | • | -30 to 80˚C | • | 5-42V | o | • |
| • | 9 (5/4) | 35V | 0-42V | • | 134 x 74 x 33 | 125g | • | -30 to 80˚C | • | 5-42V | o | • |
| • | 9 (5/4) | 35V | 0-42V | • | 134 x 74 x 33 | 143g | • | -30 to 80˚C | • | 5-42V | o | |
| • | 9 (5/4) | 35V | 0-42V | • | 134 x 74 x 33 | 143g | • | -30 to 80˚C | • | 5-42V | o | |
| • | 9 (5/4) | 35V | 0-42V | • | 134 x 74 x 33 | 143g | • | -30 to 80˚C | • | 5-42V | o | |
| • | 9 (5/4) | 35V | 0-42V | • | 134 x 74 x 33 | 143g | • | -30 to 80˚C | • | 5-42V | o | |
| • | 9 (5/4) | 35V | 0-42V | • | 134 x 74 x 33 | 143g | • | -30 to 80˚C | • | 5-42V | o | |
| • | 9 (5/4) | 35V | 0-42V | • | 134 x 74 x 33 | 143g | • | -30 to 80˚C | • | 5-42V | o | |

# V-Link232 Software

*Cellular Wireless Virtual Cable Replacement*

Any Siretta cellular terminal with V-Link232 software becomes an intelligent GPRS / UMTS, RS232 / USB cable replacement solution, ideal for wirelessly connecting remote equipment.




V-Link 232 has been designed to create an out-of-box usable wireless replacement to an RS232 / USB cable of any length.

V-Link232 enables any Siretta modem to be able to operate as a stand-alone modem without the need for any intelligence external to the modem - thus enabling the modem to manage the connection of remote equipment to a central location for its management of control.

Applications where there is no host intelligence or where the user needs to control the modem remotely will find the unique and simple to operate V-Link232 software indispensable.

V-Link232 enabled modems can also be used in multiple remote access applications.

V-Link232 is available as an option on any of the Siretta modem ranges.



## *Flexible with modes of operation*

The V-Link232 is extremely flexible and operates in one of two modes as desired - Client or Server mode. It also has some great additional features, that, in all, make V-Link232 virtual cable connection even more compelling.

In both modes any data received to the serial port of a V-Link232 enabled terminal will be forwarded over the GPRS network to the IP / port specified, and any data received from the server via the GPRS network will be forwarded to the serial port of the modem. This then creates a virtual cable replacement between two V-Link232 enabled modem endpoints placed anywhere and does not require the connected equipment to manage the connection. This extremely powerful feature of the V-Link232 enabled modems can be found in many installed applications as, the V-Link232 features, coupled with robust build of the Siretta modem range, make a compelling overall solution.

» Client Mode

In the Client mode V-Link232 acts as a client, simply connecting the modem to a remote server at a pre-specified IP address and port. It can either be setup as 'always connected', or to connect only when data is received on the serial port. Once set up, the modem with V-Link232 need no further intervention to remain in full client mode.

» Server Mode

In the Server mode V-Link232 acts as a server, where the modem listens for incoming connections from a remote client on a specified port. Additionally a source IP can be specified, and only connections from this IP will be accepted.

### Configuration Tool

The windows based application allows you to configure all settings available in one place with a single window. The settings are then saved in non-volatile memory and are activated the next time the modem is started up.




### SMS Configuration Commands

A mobile phone is used for this method of configuration employing the SMS command service.



# Accessories

*Optional Modem Accessories*

| | Part No | Description | Frequencies | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | ZEST | ZETA GPRS | ZETA UMTS V2 | ZOOM | ZULU | ZEUS |
| Power | 32889<br>PSU MULTI ADAPTOR | Compact power supply with interchangeable connectors for UK, EU, US and Australian standard mains voltage connection | | • | • | • | • | • |
| | 31557<br>POWER CABLE | Power cable with open end for termination to user power supply, 1Mtr long | | • | • | • | • | • |
| | 34677<br>ZEST PSU MULTI ADAPTOR | Compact power supply with interchangeable connectors for UK, EU, US and Australian standard mains voltage connection | • | | | | | |
| Interface | 29284<br>RS232 CABLE | Standard RS232 interface cable, male to female, 2Mtrs long | • | • | • | • | • | • |
| | 29891<br>RS232 TO USB CABLE | RS232 male to USB-A interface cable, 1.5Mtrs long | | • | | | | |
| | 33481<br>USB GPIO CABLE | Mini USB right angle interface cable with other end stripped and tinned for GPIO connection, 1Mtr long | | • | | | | |
| | 34777<br>GPIO CABLE 10 WAY 0.5M | Connection cable for 10 position GPIO, 0.5Mtrs long | | | • | | | |
| | 34436<br>USB CABLE | Standard USB interface cable, USB-A to USB Mini-B, 2Mtrs long | • | | • | • | • | |
| | 29286<br>CAT5E ETHERNET CABLE | Standard RJ-45 Ethernet cable, 1Mtr long | | | | | | • |
| | 34212<br>INTERFACE CABLE 36 WAY 0.5M | Connection cable for 36 position multi interface, 0.5Mtrs long | | | | | • | • |
| | 34218<br>INTERFACE CABLE 36 WAY 1M | Connection cable for 36 position multi interface, 1Mtr long | | | | | • | • |
| Other | 34388<br>JTAG PROGRAMMING CABLE | Programming cable for JTAG port connection, terminated to 20 way JTAG header | | | | | • | • |
| | 33755<br>2AH BATTERY | Retrofittable 2000mAh battery for backup power security | | | | | • | • |

## *About Antennas*

Siretta Antennas was formed to design, manufacture and supply the widest range of antennas for the wireless M2M market. Covering many frequencies and mounting methods, Siretta also provides customised antenna solutions ensuring all of our customers' needs are fulfilled.

Thriving on excellent customer service, Siretta offers short lead times, competitive prices and round the clock technical support.



For more information contact:

+44 (0)118 976 9014

# *Antenna Ranges*

*Breakdown of Antennas by Range*

When searching for your antenna solution, we have organised our antennas into different ranges depending on mounting methods within popular wireless technologies which makes selecting your ideal antenna easy.

| | |
|---|---|
| Alpha Range | Self-adhesive range of antennas, great for attaching inside vehicles and enclosures where they are not seen. |
| Delta Range | Knuckle joint, stub, right angle stub and whip antennas, perfect for direct connection into your equipment. |
| Echo Range | PCB or ceramic types of embedded antennas suitable for system integration. |
| Mike Range | Magnetic base range of antennas, great for temporary installations on metal surfaces. |
| Oscar Range | External or wall mount range of antennas for static locations. |
| Tango Range | Through hole mount antennas with a stud and nut, suitable for fixing onto panels. |

Within these families you will find different variations of antennas including sizing and frequencies. All of our antennas are able to be customized to fit your specification, whether it is changing the connector type or increasing the length of cable – Siretta are here to help.

## *Alpha Range - Self Adhesive*

| Antenna | GSM | UMTS | LTE | GPS | ISM | WiFi | Page/s |
|---|---|---|---|---|---|---|---|
| Alpha 1A  | • | • | | | | • | 35<br>57 |
| Alpha 3A  | • | • | | | | • | 35<br>57 |
| Alpha 4A  | | | | • | | | 45 |
| Alpha 6  | • | | | • | | | 49 |
| Alpha 7  | • | | | • | | | 49 |
| Alpha 8  | • | • | | | • | | 35<br>53 |
| Alpha 9  | • | | | • | | | 49 |
| Alpha 10  | | | | | | • | 57 |
| Alpha 11  | • | • | | | • | | 36 |
| Alpha 14  | • | • | | | • | | 36 |

| Antenna | GSM | UMTS | LTE | GPS | ISM | WiFi | Page/s |
|---|---|---|---|---|---|---|---|
| Alpha 15  | • | • | | | • | | 36 |
| Alpha 16  | | | | | | • | 58 |

## *Delta Range - Direct Connect*

| Antenna | GSM | UMTS | LTE | GPS | ISM | WiFi | Page/s |
|---|---|---|---|---|---|---|---|
| Delta 1A  | • | • | | | | | 37<br>53 |
| Delta 1C  | • | | | | | | 37 |
| Delta 2A  | • | • | | | | | 37<br>53 |
| Delta 2C  | • | | | | | | 38 |
| Delta 5  | | | | | • | | 54 |
| Delta 5A  | | | | | • | | 54 |
| Delta 6A  | • | • | | | | | 38 |

# Antenna Finder

| Antenna | GSM | UMTS | LTE | GPS | ISM | WiFi | Page/s |
|---|---|---|---|---|---|---|---|
| Delta 6B  | | | | | | • | 58 |
| Delta 6C  | | | | | | • | 58 |
| Delta 7A  | | | | | | • | 59 |
| Delta 7B  | • | • | | | | | 38 |
| Delta 8A  | | | | | | • | 59 |
| Delta 11  | | | | | • | | 54 |
| Delta 12  | | | | | • | | 55 |
| Delta 12A  | | | | | • | | 55 |
| Delta 12B  | | | | | • | | 55 |
| Delta 14  | | | | | | • | 59 |
| Delta 15  | | | | | | • | 60 |

## *Echo Range - Embedded*

| Antenna | GSM | UMTS | LTE | GPS | ISM | WiFi | Page/s |
|---|---|---|---|---|---|---|---|
| Echo 1A  | • | • | | | | | 39 |
| Echo 2  | • | • | | | • | • | 39<br>56<br>60 |
| Echo 5  | | | | • | | | 45 |
| Echo 11  | | | | | | • | 60 |
| Echo 12  | • | • | | | | | 39 |
| Echo 14  | • | • | • | | • | | 40<br>56 |
| Echo 17  | | | | | | • | 60 |
| Echo 18  | | | | | | • | 60 |
| Echo 19  | | | | • | | | 45 |
| Echo 26  | | | | • | | | 46 |
| Echo 27  | | | | • | | | 46 |

# Antenna Finder

## *Mike Range - Magnetic Mount*

| Antenna | GSM | UMTS | LTE | GPS | ISM | WiFi | Page/s |
|---|---|---|---|---|---|---|---|
| Mike 1A  | • | • | | | | | 40 |
| Mike 1B  | • | | | | • | | 40 |
| Mike 2A  | • | • | | | | | 41 |
| Mike 3A  | | | | • | | | 46 |

## *Oscar Range - Wall Mount*

| Antenna | GSM | UMTS | LTE | GPS | ISM | WiFi | Page/s |
|---|---|---|---|---|---|---|---|
| Oscar 1  | • | • | | | • | | 41 |
| Oscar 3A  | • | | | | | | 41 |
| Oscar 16  | • | | | | | | 42 |
| Oscar 17  | • | • | | | | | 42 |
| Oscar 18  | • | • | | | | • | 42 |

## *Tango Range - Through Hole*

| Antenna | GSM | UMTS | LTE | GPS | ISM | WiFi | Page/s |
|---|---|---|---|---|---|---|---|
| Tango 1  | • | • | | | | | 43 |
| Tango 2  | • | • | | | | • | 60 |
| Tango 6A  | • | | | • | | | 50 |
| Tango 6B  | • | | | • | | • | 50 |
| Tango 11A  | • | • | | | | | 43 |
| Tango 14  | • | • | | | | | 43 |
| Tango 15  | • | | | • | | • | 50 |
| Tango 16  | • | | | • | | | 51 |
| Tango 17  | • | • | | | | | 44 |
| Tango 18  | • | • | | | | | 44 |
| Tango 19  | • | | | • | | | 51 |

# Antenna Finder

| Antenna | GSM | UMTS | LTE | GPS | ISM | WiFi | Page/s |
|---|---|---|---|---|---|---|---|
| Tango 20  | | | | • | | | 47 |
| Tango 20A  | | | | • | | | 47 |
| Tango 21  | | | | • | | | 47 |
| Tango 22  | • | • | | • | | • | 51 |
| Tango 23  | | | | | | • | 62 |
| Tango 24  | | | | | | • | 62 |
| Tango 25  | | | | | | • | 62 |
| Tango 25A  | | | | | | • | 62 |
| Tango 26  | | | | | | • | 62 |
| Tango 27  | • | • | | | | | 34 |

## **Alpha 1A** - T-Bar Antenna

ADHESIVE

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1, 2.4GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | 2 max |
| Polarization | Vertical |
| Size | 130 x 11 x 4mm |
| Cable | RG174 |



Cable length and connector as required

## **Alpha 3A** - Small Flat Blade Antenna

ADHESIVE

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1, 2.4GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2.15dBi |
| VSWR | <1.5:1 |
| Polarization | Vertical |
| Size | 75 x 25 x 2.5mm |
| Cable | RG174 |



Cable length and connector as required

## **Alpha 8** - Flat Blade Antenna (IP67)

ADHESIVE

| | |
|---|---|
| Frequencies | 850, 868, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | <1.5:1 |
| Polarization | Vertical |
| Size | 113 x 21 x 3mm |
| Cable | RG174 |



Cable length and connector as required

ADHESIVE



Cable length and connector as required

## **Alpha 11** - Flat Blade Antenna

| | |
|---|---|
| Frequencies | 850, 868, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2.5dBi |
| VSWR | <1.5:1 |
| Polarization | Vertical |
| Size | 115 x 22 x 4mm |
| Cable | RG174 |

ADHESIVE



Cable length and connector as required

## **Alpha 14** - Thin Plate Antenna

| | |
|---|---|
| Frequencies | 850, 868, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | <2 |
| Polarization | Vertical |
| Size | 40 x 35.5 x 2mm |
| Cable | RG174 |

ADHESIVE



Cable length and connector as required

## **Alpha 15** - Puck Antenna

| | |
|---|---|
| Frequencies | 850, 868, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | <2.5:1 |
| Polarization | Vertical |
| Size | ø71.5 x 14.5mm |
| Cable | RG174 |

## **Delta 1A** - Stubby Antenna

DIRECT CONNECT



| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -30 to +75°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | 2 max |
| Polarization | Vertical |
| Size | 56mm |
| Connector | SMA male |

## **Delta 1C** - Stubby Antenna

DIRECT CONNECT



| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz |
| Operating temp | -45 to +75°C |
| Impedance | 50 ohm |
| Gain | 2.16dBi |
| VSWR | <1.5 to 1.7:1 |
| Polarization | Vertical |
| Size | 48 x 8mm |
| Connector | SMA male |

## **Delta 2A** - Right Angle Stubby Antenna

DIRECT CONNECT



| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -30 to +75°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | 2 max |
| Polarization | Veritcal |
| Size | 53 x 7.3mm |
| Connector | SMA male |

DIRECT CONNECT



## **Delta 2C** - Right Angle Stubby Antenna

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz |
| Operating temp | -45 to +75°C |
| Impedance | 50 ohm |
| Gain | 2.15dB |
| VSWR | <1.5:1 to < 1.7:1 |
| Polarization | Vertical |
| Size | 45 x 8mm |
| Connector | SMA male / SMA male RP |

DIRECT CONNECT



## **Delta 6A** - Hinged Antenna

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 6.8dB (peak) |
| VSWR | <2:1 |
| Polarization | Vertical |
| Size | 187.5 x 9.6mm |
| Connector | SMA male |

DIRECT CONNECT



## **Delta 7B** - ¼ Wave Hinged Antenna

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz |
| Operating temp | -20 to +60°C |
| Impedance | 50 ohm |
| Gain | 1dB |
| VSWR | <2.0:1 |
| Polarization | Vertical |
| Size | 110 x 10mm |
| Connector | SMA male |

## **Echo 1A** - PCB Antenna

EMBEDDED



Cable length and connector as required

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to 85°C |
| Impedance | 50 ohm |
| Gain | 3.66dB @ 2.1GHz |
| VSWR | <2.0:1 |
| Polarization | Vertical |
| Size | 36 x 6 x 0.6mm |
| Cable | 1.13mm Coax |

## **Echo 2** - PCB Antenna

EMBEDDED



Cable length and connector as required

| | |
|---|---|
| Frequencies | 850, 868, 900, 1800, 1900MHz, 2.1, 2.4GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | <1.5:1 |
| Polarization | Vertical |
| Size | 75 x 25 x 1mm |
| Cable | 1.13mm Coax |

## **Echo 12** - PIFA Antenna

EMBEDDED



| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -35 to +85°C |
| Impedance | 50 ohm |
| Gain | 0.67 to 5.25dB |
| VSWR | 3.0:1 max |
| Polarization | Linear |
| Size | 24 x 5.5 x 4.4mm |
| Connector | Solder |

EMBEDDED



Cable length and connector as required

## **Echo 14** - PCB Antenna

| | |
|---|---|
| Frequencies | 850, 868, 900, 1800, 1900MHz, 2.1, 2.6GHz |
| Operating temp | -20 to +60°C |
| Impedance | 50 ohm |
| Gain | 0dBi |
| VSWR | 3.2:1 |
| Polarization | Vertical |
| Size | 20 x 105 x 1mm |
| Cable | 1.13mm Coax |

MAGNETIC MOUNT



Cable length and connector as required

## **Mike 1A** - ¼ Wave Antenna

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | <2:1 |
| Polarization | Vertical |
| Size | 105 x 32mm |
| Cable | RG174 |

MAGNETIC MOUNT



Cable length and connector as required

## **Mike 1B** - ¼ Wave Antenna

| | |
|---|---|
| Frequencies | 850, 868, 900, 1800, 1900MHz |
| Operating temp | -45 to +75°C |
| Impedance | 50 ohm |
| Gain | 3.5dBi |
| VSWR | <1.5:1 |
| Polarization | Vertical |
| Size | 95 x 30mm |
| Cable | RG174 |

## **Mike 2A** - ½ Wave Antenna

MAGNETIC MOUNT

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900, 2100MHz |
| Operating temp | -40 to +75°C |
| Impedance | 50 ohm |
| Gain | 5dBi |
| VSWR | <2:1 |
| Polarization | Vertical |
| Size | 311mm |
| Cable | RG174 |



Cable length and connector as required

## **Oscar 1** - Bracket Antenna (IP67)

WALL MOUNT

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz |
| Operating temp | -30 to +80°C |
| Impedance | 50 ohm |
| Gain | 11dBi |
| VSWR | <1.6 |
| Polarization | Vertical |
| Size | 570 x 180 x 36mm |
| Connector | TNC female |



Cable length and connector as required

## **Oscar 3A** - Yagi Antenna

WALL MOUNT

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz |
| Operating temp | -30 to +80°C |
| Impedance | 50 ohm |
| Gain | 11dBi |
| VSWR | <1.6 |
| Polarization | Vertical |
| Size | 570 x 180 x 36mm |
| Connector | TNC female |



Cable length and connector as required

WALL MOUNT



Cable length and connector as required

## **Oscar 16** - Yagi Antenna

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz |
| Operating temp | -30 to +70°C |
| Impedance | 50 ohm |
| Gain | 12dBi |
| VSWR | <2:1 |
| Polarization | Vertical/Horizontal |
| Size | 170 x 35 x 147mm |
| Cable | RG58 |

WALL MOUNT



Cable length and connector as required

## **Oscar 17** - Omnidirectional Antenna

| | |
|---|---|
| Frequencies | 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to +80°C |
| Impedance | 50 ohm |
| Gain | 10dBi |
| VSWR | <1.6 |
| Polarization | Linear Vertical |
| Size | ø34 x 850mm |
| Connector | TNC female |

WALL MOUNT



Cable length and connector as required

## **Oscar 18** - Yagi Antenna

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1, 2.4GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 10dBi |
| VSWR | <2.0:1 |
| Polarization | Vertical/Horizontal |
| Size | 294 x 210 x 85mm |
| Connector | N-Type female |

## **Tango 1** - Low Profile Antenna

THROUGH HOLE

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | <1.5:1 |
| Polarization | Vertical |
| Size | 95 x 42 x 17mm |
| Cable | RG174 |



Cable length and connector as required

## **Tango 11A** - Puck Antenna (IP67)

THROUGH HOLE

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 3dBi |
| VSWR | <1.8 |
| Polarization | Linear vertical |
| Size | ø80 x 23mm |
| Cable | RG174 |



Cable length and connector as required

## **Tango 14** - Low Profile Antenna (IP65)

THROUGH HOLE

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2.15dB |
| VSWR | <2:1 |
| Polarization | Vertical |
| Size | ø94 x 18mm |
| Cable | RG174 |



Cable length and connector as required

THROUGH HOLE



Cable length and connector as required

## **Tango 17** - Waterproof Antenna (IP67)

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to +80°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | <2 |
| Polarization | Linear |
| Size | ø68 x 35mm |
| Cable | RG174 |

THROUGH HOLE



Cable length and connector as required

## **Tango 18** - ½ Wave Antenna (IP67)

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 4dBi |
| VSWR | <1.8:1 |
| Polarization | Vertical |
| Size | 320mm |
| Cable | RG174 |

THROUGH HOLE



Cable length and connector as required

## **Tango 27** - Puck Antenna (IP67)

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -30 to +65°C |
| Impedance | 50 ohm |
| Gain | 2.16dBi |
| VSWR | ≤2 : 1 |
| Polarization | |
| Size | ø46 x 15mm |
| Cable | RG174 |

## **Alpha 4A** - GPS Active Antenna (IP67)

ADHESIVE



| | |
|---|---|
| Frequencies | 1575.42MHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain (LNA) | 26±2dB |
| VSWR | <1.5:1 |
| Polarization | RHCP |
| Size | 37.6 x 33.8 x 13mm |
| Cable | RG174 |

Cable length and connector as required

## **Echo 5** - 13x13mm Active GPS Patch

EMBEDDED



| | |
|---|---|
| Frequency | 1575.42MHz |
| Operating temp | -20 to +65°C |
| Impedance | 50 ohm |
| Gain (LNA) | 18dB |
| VSWR | 1.5:1 |
| Polarization | RHCP |
| Size | 13.4 x 13.4 x 8mm |
| Cable | 1.13mm Coax |

Cable length and connector as required

## **Echo 19** - 10x10mm Active GPS Patch

EMBEDDED



| | |
|---|---|
| Frequencies | 1575.42MHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain (LNA) | 16dB |
| VSWR | 1.8:1 |
| Polarization | RHCP |
| Size | 10 x 10 x 6.2mm |
| Cable | 1.13mm Coax |

Cable length and connector as required

EMBEDDED

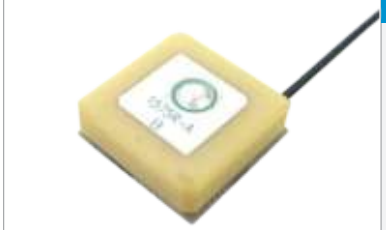


Cable length and connector as required

## **Echo 26** - 18.6 x 18.6mm Active GPS Patch

| | |
|---|---|
| Frequencies | 1575.42MHz (GLONASS option available) |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain (LNA) | 28dB |
| VSWR | <1.5:1 |
| Polarization | Vertical |
| Size | 18.6 x 18.6 x 7.5mm |
| Cable | 1.13mm Coax |

EMBEDDED



Cable length and connector as required

## **Echo 27** - 15 x 15mm Active GPS Patch

| | |
|---|---|
| Frequencies | 1575.42MHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain (LNA) | 22dB |
| VSWR | <1.5:1 |
| Polarization | Vertical |
| Size | 15 x 15 x 7.5mm |
| Cable | 1.13mm Coax |

MAGNETIC MOUNT



Cable length and connector as required

## **Mike 3A** - Dual Mount GPS Antenna **(IP67)**

| | |
|---|---|
| Frequencies | 1575.42MHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain (LNA) | 28dB |
| VSWR | 2.0 max |
| Polarization | RHCP |
| Size | 47 x 35 x 17mm |
| Cable | RG174 |

## **Tango 20** - Low Profile GPS Antenna (IP67)

THROUGH HOLE

| | |
|---|---|
| Frequencies | 1575.42MHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain (LNA) | 28dB |
| VSWR | <1.5 |
| Polarization | RHCP |
| Size | ø46.6 x 14.5mm |
| Cable | RG174 |



Cable length and connector as required

## **Tango 20A** - Low Profile GPS/Glonass (IP67)

THROUGH HOLE

| | |
|---|---|
| Frequencies | 1592 +- 3MHz |
| Operating temp | -40 to +85°C |
| Impedance | 50ohm |
| Gain (LNA) | 28dB |
| VSWR | <2.0 |
| Polarization | RHCP |
| Size | ø46.6 x 14.5mm |
| Cable | RG174 |



Cable length and connector as required

## **Tango 21** - GPS Compact Patch Antenna

THROUGH HOLE

| | |
|---|---|
| Frequencies | 1575.42 MHz |
| Operating temp | -40 to +85°C |
| Impedance | 50ohm |
| Gain (LNA) | 28dB |
| VSWR | <2.0 |
| Polarization | RHCP |
| Size | 30.5 x 30.5 x 13.9mm |
| Cable | RG178 |




Cable length and connector as required

## Alpha 6 - GSM/GPS Puck Antenna (IP68)

ADHESIVE

| | |
|---|---|
| Frequencies | 850, 900, 1575.42, 1800, 1900MHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| GPS Gain (LNA) | 28dB |
| GSM Gain | 2dBi @ 900MHz / 1dBi @ 1800MHz |
| VSWR | 2.1 |
| Polarization | GPS - RHCP, GSM - Vertical |
| Size | ø71 x 14mm |
| Cable | RG174 |



Cable length and connector as required

## Alpha 7 - GSM/GPS Puck Antenna

ADHESIVE

| | |
|---|---|
| Frequencies | 900, 1575.42, 1800MHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| GPS Gain (LNA) | 27dB |
| GSM Gain | 0dBi |
| VSWR | <2.0 : 1 |
| Polarization | GPS - RHCP, GSM - Vertical |
| Size | ø50 x 17.5mm |
| Cable | RG174 |



Cable length and connector as required

## Alpha 9 - GSM/GPS Puck Antenna

ADHESIVE

| | |
|---|---|
| Frequencies | 900, 1575.42, 1800MHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| GPS Gain | 27dB (LNA) |
| GSM Gain | 2dBi |
| VSWR | 2.0 max |
| Polarization | RHCP |
| Size | ø80 x 14mm |
| Cable | RG174 |



Cable length and connector as required

THROUGH HOLE



Cable length and connector as required

## **Tango 6A** - GSM/GPS Antenna (IP66)

| | |
|---|---|
| Frequencies | 850, 900, 1575.42, 1800, 1900MHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| GSM Gain | 2dBi @ 900MHz / 2dBi @ 1800MHz |
| GPS Gain | 28dB (LNA) |
| VSWR | 1.5:1 |
| Polarization | RHCP |
| Size | 88 x 53.8 x 62mm |
| Cable | RG174 |

THROUGH HOLE



Cable length and connector as required

## **Tango 6B** - GSM/GPS/WiFi Antenna (IP66)

| | |
|---|---|
| Frequencies | 850, 900, 1575.42, 1800, 1900MHz, 2.4-2.5GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| GSM Gain | GSM 2dBi / WiFi 2.15dBi |
| GPS Gain | GPS 28dB (LNA) |
| VSWR | 1.5:1 |
| Polarization | GSM - Vertical / GPS - RHCP |
| Size | 88 x 53.8 x 62mm |
| Cable | RG174 |

THROUGH HOLE



Cable length and connector as required

## **Tango 15** - GSM/GPS Antenna (IP65)

| | |
|---|---|
| Frequencies | 850, 900, 1575.42, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| GSM Gain | 2.15dBi |
| GPS Gain | 25dBi (LNA) |
| VSWR | <2.0 : 1 |
| Polarization | GSM - Vertical / GPS - RHCP |
| Size | ø94 x 15mm |
| Cable | RG174 |

## **Tango 16** - GSM/GPS Antenna (IP67)

THROUGH HOLE

| | |
|---|---|
| Frequencies | 850, 900, 1575.42, 1800, 1900MHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| GSM Gain | GSM 2dBi, |
| GPS Gain | 28dBi (LNA) |
| VSWR | <1.5 |
| Polarization | GSM - Linear / GPS - RHCP |
| Size | ø50 x 48mm |
| Cable | RG174 |



Cable length and connector as required

## **Tango 19** - GSM/GPS Antenna (IP67)

THROUGH HOLE

| | |
|---|---|
| Frequencies | 850, 900, 1575.42, 1800, 1900MHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| GSM Gain | 2dBi @ 900MHz / 1dBi @ 1900MHz |
| Gain (LNA) | 28dBi |
| VSWR | GSM - 2.0 / GPS - 1.5:1 |
| Polarization | GSM - Vertical / GPS - RHCP |
| Size | ØØ46 x 14.5mm |
| Cable | RG174 |



Cable length and connector as required

## **Tango 22** - GSM/GPS/WiFi Antenna (IP67)

THROUGH HOLE

| | |
|---|---|
| Frequencies | 850, 900, 1575.42, 1800, 1900MHz, 2.1, 2.4Ghz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| GSM Gain | 2dBi / WiFi 0dBi |
| GPS Gain | 28dBi (LNA) |
| VSWR | GSM - 2.0 / GPS - 1.5 / WiFi - 2.0 |
| Polarization | GSM - Vertical / GPS - RHCP |
| Size | ø80 x 15mm |
| Cable | RG174 |



Cable length and connector as required

## **Alpha 8** - Blade Antenna (IP67)

ADHESIVE

| | |
|---|---|
| Frequencies | 850, 868, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | <2:1 |
| Polarization | Vertical |
| Size | 113 x 21 x 3mm |
| Cable | RG174 |



Cable length and connector as required

## **Delta 1A** - Stubby Antenna

DIRECT CONNECT

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -30 to +75°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | 2 max |
| Polarization | Vertical |
| Size | 56mm |
| Connector | SMA male |



## **Delta 2A** - Right Angle Stubby Antenna

DIRECT CONNECT

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1GHz |
| Operating temp | -30 to +75°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | 2 max |
| Polarization | Veritcal |
| Size | 53 x 7.3mm |
| Connector | SMA male |



DIRECT CONNECT



## **Delta 5** - Flexi Antenna

| | |
|---|---|
| Frequencies | 868MHz |
| Operating temp | -30 to +75°C |
| Impedance | 50 ohm |
| Gain | 3dBi |
| VSWR | <2:1 |
| Polarization | Vertical |
| Size | 85mm |
| Connector | SMA male |

DIRECT CONNECT



## **Delta 5A** - Flexi Antenna

| | |
|---|---|
| Frequencies | 868MHz |
| Operating temp | -30 to +75°C |
| Impedance | 50 ohm |
| Gain | 3dBi |
| VSWR | <2:1 |
| Polarization | Vertical |
| Size | 100mm |
| Connector | SMA male |

DIRECT CONNECT



## **Delta 11** - Flexi Antenna

| | |
|---|---|
| Frequencies | 433MHz |
| Operating temp | -40 to +75°C |
| Impedance | 50 ohm |
| Gain | 2.15dB |
| VSWR | <2.0 : 1 |
| Polarization | Vertical |
| Size | 90.2 x 11.8mm |
| Conector | SMA Male |

## **Delta 12** - Flexi Whip Antenna

DIRECT CONNECT



| | |
|---|---|
| Frequencies | 151/173MHz |
| Operating temp | -30 to +75°C |
| Impedance | 50 ohm |
| Gain | 3dBi |
| VSWR | ≤2.0:1 |
| Polarization | Vertical |
| Size | 130mm |
| Connector | SMA male, BNC male |

## **Delta 12A** - Flexi Whip Antenna

DIRECT CONNECT



| | |
|---|---|
| Frequencies | 433/458MHz |
| Operating temp | -30 to +75°C |
| Impedance | 50 ohm |
| Gain | 3dBi |
| VSWR | ≤2.0:1 |
| Polarization | Vertical |
| Size | 130mm |
| Connector | SMA male, BNC male |

## **Delta 12B** - Flexi Whip Antenna

DIRECT CONNECT



| | |
|---|---|
| Frequencies | 869MHz |
| Operating temp | -30 to +75°C |
| Impedance | 50 ohm |
| Gain | 3dBi |
| VSWR | ≤2.0:1 |
| Polarization | Vertical |
| Size | 130mm |
| Connector | SMA male / BNC male |

EMBEDDED



Cable length and connector as required

## **Echo 2** - PCB Antenna

| | |
|---|---|
| Frequencies | 850, 868, 900, 1800, 1900MHz, 2.1, 2.4GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | <1.5:1 |
| Polarization | Vertical |
| Size | 75 x 25 x 1mm |
| Cable | 1.13mm Coax |

EMBEDDED



Cable length and connector as required

## **Echo 14** - PCB Antenna

| | |
|---|---|
| Frequencies | 850, 868, 900, 1800, 1900MHz, 2.1, 2.6GHz |
| Operating temp | -20 to +60°C |
| Impedance | 50 ohm |
| Gain | 0dBi |
| VSWR | 3.2:1 |
| Polarization | Vertical |
| Size | 20 x 105 x 1mm |
| Cable | 1.13mm |

## **Alpha 1A** - T-Bar Antenna

ADHESIVE

| | |
|---|---|
| Frequencies | 850, 900, 1800, 1900MHz, 2.1, 2.4GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | 2 max |
| Polarization | Vertical |
| Size | 130 x 11 x 4mm |
| Cable | RG174 |



## **Alpha 3A** - Small Flat Blade Antenna

ADHESIVE

| | |
|---|---|
| Frequencies | 850, 868, 900, 1800, 1900MHz, 2.1, 2.4-2.5GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2.15dB |
| VSWR | <2.0 : 1 |
| Polarization | Linear |
| Size | 75 x 25 x 2.5mm |
| Cable | RG174 |



Cable length and connector as required

## **Alpha 10** - Blade Antenna

ADHESIVE

| | |
|---|---|
| Frequencies | 2.4-2.5GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 3.03 - 2.6dBi |
| VSWR | <1.5:1 |
| Polarization | Vertical |
| Size | 115 x 22 x 4mm |
| Cable | RG174 |



Cable length and connector as required

ADHESIVE



Cable length and connector as required

## **Alpha 16** - Thin Plate Antenna

| | |
|---|---|
| Frequencies | 2.4 - 2.5GHz |
| Operating temp | -40 to +60°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | <2.0:1 |
| Polarization | Vertical |
| Size | 35.5 x 39.9 x 2mm |
| Cable | RG174 |

DIRECT CONNECT



## **Delta 6B** - Hinged Antenna

| | |
|---|---|
| Frequencies | 2.4 - 2.5GHz |
| Operating temp | -20 to +65°C |
| Impedance | 50 ohm |
| Gain | 5dBi |
| VSWR | <2.0:1 |
| Polarization | Vertical |
| Size | 196 x 12.5mm |
| Connector | SMA male / SMA male RP |

DIRECT CONNECT



## **Delta 6C** - Hinged Antenna

| | |
|---|---|
| Frequencies | 2.4, 5.8GHz |
| Operating temp | -20 to +65°C |
| Impedance | 50 ohm |
| Gain | 5dBi |
| VSWR | <2.0:1 |
| Polarization | Vertical |
| Size | 196 x 12.5mm |
| Connector | SMA male / SMA male RP |

DIRECT CONNECT

## **Delta 7A** - Hinged Antenna

| | |
|---|---|
| Frequencies | 2.4, 5.8GHz |
| Operating temp | -20 to +65°C |
| Impedance | 50 ohm |
| Gain | 1.5 - 2.1dBi |
| VSWR | <2.0:1 |
| Polarization | Vertical |
| Size | 110 x 10mm |
| Connector | SMA male / SMA male RP |



DIRECT CONNECT

## **Delta 8A** - Stubby Antenna

| | |
|---|---|
| Frequencies | 2.4 - 2.5GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 0dBi |
| VSWR | <2:1 |
| Polarization | Vertical |
| Size | 27mm |
| Connector | SMA male / SMA male RP |



DIRECT CONNECT

## **Delta 14** - Stubby Antenna

| | |
|---|---|
| Frequencies | 2.4 - 2.5GHz |
| Operating temp | -20 to +60°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | <2.0:1 |
| Polarization | Vertical |
| Size | 56mm |
| Connector | SMA male RP |



DIRECT CONNECT



## **Delta 15** - Right Angle Stubby Antenna

| | |
|---|---|
| Frequencies | 2.4 - 2.5GHz |
| Operating temp | -20 to +60°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | <2.0:1 |
| Polarization | Vertical |
| Size | 53.5mm |
| Connector | SMA male RP |

EMBEDDED



Cable length and connector as required

## **Echo 2** - PCB Antenna

| | |
|---|---|
| Frequencies | 850, 868, 900, 1800, 1900MHz, 2.1, 2.4GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | <1.5:1 |
| Polarization | Vertical |
| Size | 75 x 25 x 1mm |
| Cable | 1.13mm Coax |

EMBEDDED



Cable length and connector as required

## **Echo 11** - PCB Antenna

| | |
|---|---|
| Frequencies | 2.4 - 2.5GHz |
| Operating temp | -20 to +65°C |
| Impedance | 50 ohm |
| Gain | 2.6dBi |
| VSWR | <1.6:1 |
| Polarization | Vertical |
| Size | 45 x 10 x 1mm |
| Cable | 1.13mm Coax |

## Echo 17 - PCB Antenna

EMBEDDED

| | |
|---|---|
| Frequencies | 2.4 - 2.5GHz |
| Operating temp | -20 to +60°C |
| Impedance | 50 ohm |
| Gain | 2.6dBi |
| VSWR | 2.0 : 1 |
| Polarization | Vertical |
| Size | 45 x 10 x 0.6mm |
| Cable | 1.13mm Coax |



Cable length and connector as required

## Echo 18 - PCB Antenna

EMBEDDED

| | |
|---|---|
| Frequencies | 2.4 - 2.5GHz |
| Operating temp | -20 to +60°C |
| Impedance | 50 ohm |
| Gain | 2.6dBi |
| VSWR | 2.0:1 |
| Polarization | Vertical |
| Size | 37 x 0.6mm |
| Cable | 1.13mm Coax |



Cable length and connector as required

## Tango 2 - PCB Antenna

THROUGH HOLE

| | |
|---|---|
| Frequencies | 800, 900, 1800, 1900MHz, 2.1, 2.4HHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 2.2dBi |
| VSWR | <1.5:1 |
| Polarization | Vertical/Horizontal |
| Size | 75 x 80 x 10mm |
| Cable | RG174 |



Cable length and connector as required

THROUGH HOLE



Cable length and connector as required

## **Tango 23** - Puck Antenna (IP67)

| | |
|---|---|
| Frequencies | 2.4 - 2.5GHz, 5.1 - 5.8GHz |
| Operating temp | -40 to +85°C |
| Impedance | 50 ohm |
| Gain | 3dBi @ 2.4GHz; 5dBi @ 5GHz |
| VSWR | <1.7:1 |
| Polarization | Vertical |
| Size | ø80 x 23mm (not including screw thread) |
| Cable | RG174 |

THROUGH HOLE



Cable length and connector as required

## **Tango 24** - Puck Antenna (IP67)

| | |
|---|---|
| Frequencies | 2.4 - 2.5GHz |
| Operating temp | -30 to +60°C |
| Impedance | 50 ohm |
| Gain | 3dBi |
| VSWR | <1.5:1 |
| Polarization | Vertical |
| Size | ø40 x 15mm (not including screw thread) |
| Cable | RG174 |

THROUGH HOLE



Cable length and connector as required

## **Tango 25** - Miniature Antenna (IP65)

| | |
|---|---|
| Frequencies | 2.4 - 2.5GHz |
| Operating temp | -30 to +60°C |
| Impedance | 50 ohm |
| Gain | 2dBi |
| VSWR | <2.0:1 |
| Polarization | Vertical |
| Size | ø22 x 22mm (not including screw thread) |
| Cable | RG174 |

## **Tango 25A** - Miniature Antenna (IP65)

THROUGH HOLE



Cable length and connector as required

| | |
|---|---|
| Frequencies | 2.4 - 2.5GHz, 5.1 - 5.8GHz |
| Operating temp | -30 to +60°C |
| Impedance | 50 ohm |
| Gain | 2dBi @ 2.4GHz / 5dBi @ 5GHz |
| VSWR | <2.0:1 |
| Polarization | Vertical |
| Size | ø22 x 22mm (not including screw thread) |
| Cable | RG174 |

## **Tango 26** - Miniature Antenna (IP65)

THROUGH HOLE



Cable length and connector as required

| | |
|---|---|
| Frequencies | 2.4 - 2.5GHz |
| Operating temp | -30 to +60°C |
| Impedance | 50 ohm |
| Gain | 0.5dBi @ 2.4GHz |
| VSWR | <2.0:1 |
| Polarization | Vertical |
| Size | ø22.3 x 14.75mm (not including screw thread) |
| Cable | RG174 |

# *About RF Cables*

Siretta RF cable assemblies are generally used as an adaptor to connect two devices in RF signal transmission – typically a wireless module and antenna.

### Custom cable assemblies in 10 days

Siretta is the top RF cable assembly manufacturer in the UK. We have many standard RF cable types and variations in stock. In just 10 days, we can assemble your customised requests and/or design a cable suited for your application.

### Meeting our customers needs

For custom cables we will make a price quotation and after the price has been approved by you, we will provide technical drawings for your approval.

Each RF cable assembly is 100% signal continuity tested, in process and at completion. Our on-going quality control inspection guarantees every customer will receive the ultimate in quality cables.



# *RF Internal Cables*

*Our Most Popular Range of RF Internal Cables*

Our internal RF cables are available in all cable styles as shown in the table on page 74.

Some internal cables are more popular than others. The popular styles we strive to have high availability on and we are continuously manufacturing them. Other combinations are less popular but can be made quickly with low minimum order quantities.

**WE ONLY SUPPLY QUALITY CONNECTORS AND CABLES WITH ASSEMBLY TO MATCH AND AT A GREAT PRICE POINT.**



| | Connector A | Connector B | Cable Type | Cable Length | Part No |
|---|---|---|---|---|---|
|  | GSC | SMA Female Bulkhead | 0.81mm coax | 100mm<br>150mm<br>200mm | ASMI010X081S11<br>ASMI015X081S11<br>ASMI020X081S11 |
|  | GSC | FME Male Bulkhead | 0.81mm coax | 100mm<br>150mm<br>200mm | ASMI010Y081S11<br>ASMI015Y081S11<br>ASMI020Y081S11 |
|  | MCF (GSC) | MCF (GSC) | 0.81mm coax | 50mm<br>100mm<br>150mm | ASMI010I081S11<br>ASMI015I081S11<br>ASMI005I081S11 |
|  | uFL / IPEX | SMA Female Bulkead | 1.13mm coax | 100mm<br>150mm<br>200mm<br>300mm | ASMG010X113S11<br>ASMG015X113S11<br>ASMG020X113S11<br>ASMG030X113S11 |
|  | uFL / IPEX | uFL / IPEX | 1.13mm coax | 50mm<br>100mm<br>150mm | ASMG010G113S11<br>ASMG015G113S11<br>ASMG005G113S11 |
|  | MMCX Male RA | SMA Female Bulkhead | RG174 | 100mm<br>150mm<br>200mm<br>250mm | ASMK010X174S11<br>ASMK015X174S11<br>ASMK020X174S11<br>ASMK025X174S11 |

# *RF Extension Cables*

*Our Most Popular Range of RF Extension Cables*

At Siretta we have produced a collection of off-the-shelf or short delivery RF extension cables in RG174 and RG58 cable styles. These are high quality cables made to a high standard using quality components. Availability, quality and a great price point is the philosophy of Siretta RF cables.



Extension cables are suitable for either direct connection to antennas that feature a pigtail and connector output, such as the Oscar range, or for extending existing cable runs to a longer distance.

Our cables assemblies utilitise RG58 and RG174 cables, with a choice of SMA, FME, TNC and N-Type popular connector types. Standard cable lengths offered are 3m, 5m and 10m, although consideration should be given to minimising the overall cable length wherever possible to minimise losses. This is especially important in locations with limited reception.

Please also review our low loss RF cables as we have the same philosophy of quality, availability and a great price point for this range too.

## *Low Loss Extension Cables*

We offer our low loss extension cables in longer length than the standard extension cables. Customers should consider using these extension cables for very long length to be sure the signal loss in minimised.

- » **HIGH AVAILABILITY**
- » **POPULAR LENGTHS**
- » **QUALITY COMPONENT & BUILD**
- » **COMPETITIVE PRICING**



# *Low Loss LLC100A Extension Cables*
## *(RG174 replacement)*

| Connector A | Connector B | Cable Length | Part No | High Stock Availability |
|---|---|---|---|---|
| SMA Male | SMA Female | 3m<br>5m<br>10m | ASMA300B174L13<br>ASMA500B174L13<br>ASMA1000B174L13 | ✓<br>✓ |
| SMA Male | FME Female | 3m<br>5m<br>10m | ASMA300F174L13<br>ASMA500F174L13<br>ASMA1000F174L13 | ✓<br>✓ |
| SMA Male | MCX Male | 3m<br>5m<br>10m | ASMA300T174L13<br>ASMA500T174L13<br>ASMA1000T174L13 | |
| SMA Male | MMCX Male | 3m<br>5m<br>10m | ASMA300L174L13<br>ASMA500L174L13<br>ASMA1000L174L13 | |
| FME Male | MCX Male | 3m<br>5m<br>10m | ASME300T174L13<br>ASME500T174L13<br>ASME1000T174L13 | |
| FME Female | FME Male | 3m<br>5m<br>10m | ASMF300E174L13<br>ASMF500E174L13<br>ASMF1000E174L13 | ✓<br>✓ |
| FME Female | MCX Male | 3m<br>5m<br>10m | ASMF300T174L13<br>ASMF500T174L13<br>ASMF1000T174L13 | |



# *Low Loss LLC200A Extension Cables*

*(RG58 replacement)*

| | Connector A | Connector B | Cable Length | Part No | High Stock Availability |
|---|---|---|---|---|---|
|  | SMA Male | SMA Female | 3m<br>5m<br>10m<br>15m<br>20m | ASMA300B058L13<br>ASMA500B058L13<br>ASMA1000B058L13<br>ASMA1500B058L13<br>ASMA2000B058L13 | |
|  | SMA Male | FME Female | 3m<br>5m<br>10m<br>15m<br>20m | ASMA300F058L13<br>ASMA500F058L13<br>ASMA1000F058L13<br>ASMA1500F058L13<br>ASMA2000F058L13 | |
|  | SMA Male | N-Type Male | 3m<br>5m<br>10m<br>15m<br>20m | ASMA300R058L13<br>ASMA500R058L13<br>ASMA1000R058L13<br>ASMA1500R058L13<br>ASMA2000R058L13 | |
|  | FME Male | FME Female | 3m<br>5m<br>10m<br>15m<br>20m | ASME300F058L13<br>ASME500F058L13<br>ASME1000F058L13<br>ASME15000F058L13<br>ASME2000F058L13 | |
|  | TNC Male | SMA Male | 3m<br>5m<br>10m<br>15m<br>20m | ASMZG300A058L13<br>ASMZG500A058L13<br>ASMZG1000A058L13<br>ASMZG1500A058L13<br>ASMZG2000A058L13 | |
|  | TNC Male | FME Female | 3m<br>5m<br>10m<br>15m<br>20m | ASMZG300F058L13<br>ASMZG500F058L13<br>ASMZG1000F058L13<br>ASMZG1500F058L13<br>ASMZG2000F058L13 | |

# *RG174 Extension Cables*

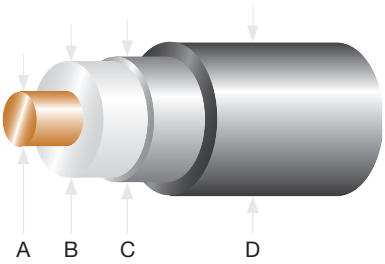
| Connector A | Connector B | Cable Length | Part No | High Stock Availability |
|---|---|---|---|---|
| SMA Male | SMA Female | 0.5m<br>1m<br>3m | ASMA050B174S13<br>ASMA100B174S13<br>ASMA300B174S13 | <br>✓<br>✓ |
| SMA Male | FME Female | 0.5m<br>1m<br>3m | ASMA050F174S13<br>ASMA100F174S13<br>ASMA300B174S13 | <br>✓<br>✓ |
| SMA Male | MCX Male | 0.5m<br>1m<br>3m | ASMA050T174S13<br>ASMA100T174S13<br>ASMA300T174S13 | |
| SMA Male | MMCX Male | 0.5m<br>1m<br>3m | ASMA050L174S13<br>ASMA100L174S13<br>ASMA300L174S13 | |
| FME Male | MCX Male | 0.5m<br>1m<br>3m | ASME050T174S13<br>ASME100T174S13<br>ASME300T174S13 | |
| FME Female | FME Male | 0.5m<br>1m<br>3m | ASMF050E174S13<br>ASMF100E174S13<br>ASMF300E174S13 | <br>✓<br>✓ |
| FME Female | MCX Male | 0.5m<br>1m<br>3m | ASMF050T174S13<br>ASMF100T174S13<br>ASMF300T174S13 | |



# *RG58 Extension Cables*

| | Connector A | Connector B | Cable Length | Part No | High Stock Availability |
|---|---|---|---|---|---|
|  | SMA Male | SMA Female | 3m<br>5m | ASMA300B058S13<br>ASMA500B058S13 | ✓ |
|  | SMA Male | FME Female | 3m<br>5m | ASMA300F058S13<br>ASMA500F058S13 | ✓ |
|  | SMA Male | N-Type Male | 3m<br>5m | ASMA300R058S13<br>ASMA500R058S13 | ✓ |
|  | FME Male | FME Female | 3m<br>5m | ASME300F058S13<br>ASME500F058S13 | |
|  | TNC Male | SMA Male | 3m<br>5m<br>10m | ASMZG300A058S13<br>ASMZG500A058S13<br>ASMZG1000A058S13 | ✓<br>✓ |
|  | TNC male | FME Female | 3m<br>5m | ASMZG300F058S13<br>ASMZG500F058S13 | ✓ |

# RF Cables Sizes




| Cable Type | Connector types | Min Bend Radius | Dimensions (mm) | | | | Insulator Material |
|---|---|---|---|---|---|---|---|
| | | | A Core | B Insulator | C Shield | D Jacket | |
| 0.81mm | u.FL, IPEX, MHF2, GSC, HSSC | 3.24 | 0.15 | 0.4 | 0.65 | 0.81 | PFA |
| 1.13mm | u.FL, GSC, IPEX, SMA, FME, SMB, TNC, TNX, MMCX | 4.5 | 0.24 | 0.68 | 0.9 | 1.13 | FEP |
| 1.13mm * | u.FL, GSC, IPEX, SMA, FME, SMB, TNC, TNX, MMCX | 4.5 | 0.22 | 0.7 | | 1.13 | FEP |
| 1.32mm | IPEX, GSC, SMA, FME, SMB, TNC, MCX, MMCX | | 0.22 | 0.7 | | 1.32 | FEP |
| 1.37mm | u.FL, IPEX, GSC, SMA, FME, SMB, TNC, MCX, MMCX | 9 | 0.32 | 0.92 | | 1.37 | FEP |
| 1.48mm | HFL, IPEX, GSC, SMA, MMCX, MCA, SMB, FME | 9 | 0.31 | 0.86 | | 1.48 | FEP |
| RG178 | IPEX, MHF, MMCX, MCX, SSMB, SMA, FME | 9 | 0.31 | 0.86 | | 1.8 | FEP |
| RG316 | MMCX, SMA, FME, SMB | | 0.53 | 1.53 | | 2.53 | FEP |
| RG174 | SMA, SMB, MMCX, MCX, FME, TNC, BNC | 10.5 | 0.48 | 1.55 | | 2.7 | XLPE |
| RG42 | SMA | 10 | 0.94 | 2.95 | | 3.06 | Solid PTFE |
| RG58 | SMA, SMB, BNC. TNC, UHF, N | 20 | 19 x 0.18 | 2.95 | | 4.95 | PE |

## Low Loss Cables

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LLC100A | SMA, SMB, MMCX, MCX, FME, TNC, BNC | 6.4 | 0.46 | 1.52 | 2.11 | 2.79 | Solid PE |
| LLC200A | SMA, SMB, BNC. TNC, UHF. N | 20 | 10.2 | 2.9 | 3.4 | 5 | Foam PE |
| RG213 | N-type | | 2.3 | 7.24 | | 10.3 | PE |

| | |
|---|---|
| PFA | Cross linked poly ethylene |
| FEP | Fluorinated ethylene propylene - similar to PTFE but flexy - much higher temp before melting |
| PFA | Perfluoroalkoxy - similar to PTFE but flex |
| PE | Polyethylene |
| PVC | Poly Vinyl Chloride |
| PTFE | Polytetrafluoroethylene |

u.FL, IPEX and GSC connectors:

| | |
|---|---|
| u.FL | Four types depending on cable size. |
| IPEX | There are 4 sizes - MHF, MHF2, MHF3, MHF4 (smallest). Dictated by cable size. Std is MHF 2.5mm height. |
| GSC | Only one size. |

Check small connector guide details

| Jacket Material | Loss dB/M @ 2GHz | Frequency Range | Comments |
|---|---|---|---|
| PFA | 4.4 | to 6GHz | Internal antenna pigtails |
| FEP | 3.2 | to 6GHz | Most popular cable for internal use. Internal antenna pigtals, internal to bulkhead connector cable. |
| FEP | 2.2 | to 6GHz | * Low loss verison of the standard 1.13mm |
| FEP | 2.8 | to 6GHz | |
| FEP | 2.4 @2.5GHz | to 6GHz | Has same size conductor as 1.48mm and RG178 cable, but smaller overall diameter, similar cable loss but more flexible in limited space. |
| FEP | | to 6GHz | 1.48mm is the most popular thin RF coaxial cable. |
| FEP | 2.6 @1.8GHz | to 6GHz | |
| FEP | 2.06 @2.4GHz | to 3GHz | Used internally instead of RG174. RG136 can go high temp and is more flexible. |
| PVC | 1.175 @1GHz | to 6GHz | This is the most popular cable for GPS and GSM antennas. Low temp spec. |
| N/A | 0.58 | to 6GHz | Outer jacket - tin soaked braid. Semi rigid cable |
| PVC | 1.06 @2.4GHz | to 6GHz | Standard RF cable for outside use. |
| PVC | 1.15 | to 6GHz | Low loss version of RG174 and much more flexible |
| PVC | 0.15 @200MHz | to 6GHz | *Low loss version of the standard RG58. |
| PVC | 0.25 @900MHz | to 6GHz | Low loss cable for the base station industry. |

# About RF Connectors and Adaptors

A range of high quality connector and adaptor products, suitable for the production of new cable assemblies, the re-termination of existing cables, or for providing compatibility to existing cables or equipment.

## RF Adaptors

Adaptors are especially suitable for extending or joining cable runs or equipment terminated with alternative connector types, avoiding the need to re-terminate or change the existing installation. Adaptors may be used either as a temporary solution to provide compatibility, or for permanent installation into a working system.

## RF Connectors

Connector products are offered in the popular SMA, FME and MMCX styles, for cable types RG58 and RG174. All connectors are designed for crimp termination, producing a reliable and high performance connection for a variety of wireless applications.



For more information contact:

+44 (0)118 976 9014

# *RF Connectors*

*Our Most Popular Range of RF Connectors*

| | RG174 | RG58 |
|---|---|---|
| SMA Male & RP Crimp |  |  |
| SMA Female Crimp |  |  |
| MMCX RA Crimp |  | - |
| FME Female Crimp |  |  |
| FME Male Crimp |  |  |

# *RF Adaptors*

*Our Most Popular Range of RF Adaptors*

| | Connector A | Connector B | Part No |
|---|---|---|---|
|  | SMA Male | SMA Male | ADAPT/SMAM/SMAM |
|  | SMA Male | SMA Female | ADAPT/SMAM/SMAF |
|  | SMA Male | SMA Male RP | ADAPT/SMAM/SMAM/RP |
|  | SMA Male | SMA Female RP | ADAPT/SMAM/SMAF/RP |
|  | SMA Male | SMA Female RA | ADAPT/SMAM/SMAF/RA |
|  | SMA Female | SMA Female | ADAPT/SMAF/SMAF |
|  | SMA Female | SMA Male RP | ADAPT/SMAF/SMAM/RP |

| | Connector A | Connector B | |
|---|---|---|---|
|  | SMA Female | SMA Female RP | ADAPT/SMAF/SMAF/RP |
|  | SMA Female | TNC Male | ADAPT/SMAF/TNCM |
|  | FME Male | SMA Male | ADAPT/FMEM/SMAM |
|  | FME Male | SMA Female | ADAPT/FMEM/SMAF |
|  | FME Male | FME Male | ADAPT/FMEM/FMEM |
|  | FME Male | FME Female | ADAPT/FMEM/FMEF |
|  | FME Male | TNC Male | ADAPT/FMEM/TNCM |
|  | FME Female | SMA Male | ADAPT/FMEF/SMAM |
|  | FME Female | SMA Female | ADAPT/FMEF/SMAF |

| | Connector A | Connector B | |
|---|---|---|---|
|  | FME Female | FME Female | ADAPT/FMEF/FMEF |
|  | SMB Male | SMA Female | ADAPT/SMBM/SMAF |
|  | MMCX Male | SMA Female | ADAPT/MMCXM/SMAF |
|  | MMCX Female | SMA Male | ADAPT/MMCXF/SMAM |
|  | MCX Male | FME Male | ADAPT/MCXM/FMEM |
|  | MCX Female | SMA Male | ADAPT/MCXF/SMAM |
|  | MCX Female | FME Male | ADAPT/MCXF/FMEM |
|  | N-Type Male | SMA Female | ADAPT/N-TYPEM/SMAF |

## Disclaimer

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Product specifications are correct at the time of generating this catalogue and the latest accurate information can be found at www.siretta.co.uk

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