

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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For all Embedded Antennas



Part Number Structure:

Connector

33-aaaa-xx-yyyy-zz

Product

Cable length in mm

Valid Connectors

00 = SMA straight male (plug) 10 = SMA Right Angle ** 20 = SMA Female 01 = TNC female11 = Reverse polarity SMA** 22 = R/A OMA**12 = Waterproof SMA** 02 = MCX straight male (plug) 23 = SMP**03 = MMCX straight male (plug) 13 = SSMA ** 24 = SMC Male 04 = SMB straight male (plug) 25 = SMC Straight Female 05 = MCX right angle male (plug) 15 = TNC male (plug)26 = SMB Straight Female

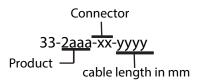
06 = MMCX right angle male (plug) 16 = N-Type Male** 27 = MCX Female Straight 17 = BNC Male** 28 = SSMCX Straight Plug** 08 = H.FL (female)** (micro-coax cable) $18 = FME^{**}$ 29 = R/A SSMCX Plug **

09 = U.FL (micro-coax cable) 19 = MMCX Female 30 = SMB with Overmold**
33 = MMCX straight male **

34x = FAKRA (replace "x" with colour code)**

For the TW2000 Family of Products

Part Number Structure:



Valid Connectors

Without Cable:

07 = SMA female (jack) bulkhead

With Cable (max length 5m):

00 = SMA straight male (plug)10 = SMA Right Angle **20 = SMA Female01 = TNC female11 = Reverse polarity SMA**22 = R/A QMA**02 = MCX straight male (plug)12 = Waterproof SMA**23 = SMP**03 = MMCX straight male (plug)13 = SSMA **24 = SMC Male

03 = MMCX straight male (plug) 13 = SSMA ** 24 = SMC Male 04 = SMB straight male (plug) 25 = SMC Straight Female

 $05 = MCX \text{ right angle male (plug)} \qquad 15 = TNC \text{ male (plug)} \qquad 26 = SMB \text{ Straight Female}$ $06 = MMCX \text{ right angle male (plug)} \qquad 16 = N-\text{Type Male**} \qquad 27 = MCX \text{ Female Straight}$ $17 = BNC \text{ Male**} \qquad 28 = SSMCX \text{ Straight Plug**}$

18 = FME**

19 = MMCX Female

20 = 35MCX Straight Fitting
29 = R/A SSMCX Plug **

30 = SMB with Overmold**

33 = MMCX straight male **

34x = FAKRA (replace "x" with colour code)**

** Premiums apply. Please check with your Distributor

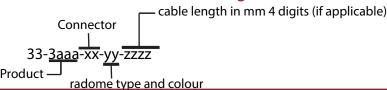
NOTE: To order any of the TW2000 antennas with NO MAGNETS, add "NM" after the Product (eg. 33-2410NM-00-3000). To add Adhesive Tape to the bottom of the same, add "AT" after the Product Name (eg. 33-2410AT-07). If you desire both, then use NMAT, eg. 33-2410NMAT-07.

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For the **TW3000** Family of Products

For TW3865, TW3870E, TW3965 & TW3970E - refer to Page 1 Embedded Antennas





Valid Connectors

Without Cable:

01 = TNC female14 = N-Type female

With Cable (max length 5m):

00 = SMA straight male (plug) 10 = SMA Right Angle ** 20 = SMA Female 01 = TNC female 11 = Reverse polarity SMA** 22 = R/A QMA**02 = MCX straight male (plug) 12 = Waterproof SMA** 23 = SMP**13 = SSMA ** 03 = MMCX straight male (plug) 24 = SMC Male

04 = SMB straight male (plug) 25 = SMC Straight Female 05 = MCX right angle male (plug) 15 = TNC male (plug) 26 = SMB Straight Female 06 = MMCX right angle male (plug) 16 = N-Type Male** 27 = MCX Female Straight 17 = BNC Male** 28 = SSMCX Straight Plug** $18 = FME^{**}$ 29 = R/A SSMCX Plug **

19 = MMCX Female 30 = SMB with Overmold** 33 = MMCX straight male **

NMO = NMO mount 34x = FAKRA (replace "x" with colour code)**

** Premiums apply. Please check with your Distributor

Radome Codes:

00 = Dark grey Conical 10 = Dark grey low profile 01 = White Conical 11 = White low profile

For the **TW4000** Family of Products

Part Number Structure:

Connector Product · cable length in mm

Valid Connectors

00 = SMA straight male (plug) 10 = SMA Right Angle ** 20 = SMA Female 11 = Reverse polarity SMA** 01 = TNC female 22 = R/A QMA**23 = SMP**02 = MCX straight male (plug) 12 = Waterproof SMA** 03 = MMCX straight male (plug) 13 = SSMA ** 24 = SMC Male

04 = SMB straight male (plug) 25 = SMC Straight Female 05 = MCX right angle male (plug) 15 = TNC male (plug)26 = SMB Straight Female 06 = MMCX right angle male (plug) 16 = N-Type Male** 27 = MCX Female Straight 17 = BNC Male** 28 = SSMCX Straight Plug**

 $18 = FME^{**}$ 29 = R/A SSMCX Plug ** 19 = MMCX Female 30 = SMB with Overmold** 33 = MMCX straight male **

34x = FAKRA (replace "x" with colour code)**

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** Premiums apply. Please check with your Distributor

NOTE: To order any of the TW4000 antennas with NO MAGNETS, add "NM" after the Product (eg. 33-4421NM-00-3000). To add Adhesive Tape to the bottom of the same, add "AT" after the Product Name (eg. 33-4421AT-00-3000). If you desire both, then add them together, eg>

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For the TW5000 Family of Products

Part Number Structure:



Configuration code: x= 0 = RS232 12V; 1 = RS232 5V; 2 = CMOS 5V, 3 = CMOS, 3.3V, 5 = RS232 3.3V

Radome Codes:

00 = Dark grey Conical 10 = Dark grey low profile 01 = White Conical 11 = White low profile

For the **VP6000** Family of Products

Part Number Structure: 33-6abbcd-ee-ff-gg

a = Covered Frequencies:

0 = All GNSS frequencies + L-Band (1525 - 1559 MHz

2 = L1/L2, G1/G2, B1/B2, E1 + L-Band

3= L1/L2/L5, G1/G2/G3, B1/B2, E1/E5a+b

4 - 9 = Reserved for future use

bb = LNA Gain

35 = 35dB

50 = 50 dB

c = Base Type

0 = Standard base

1 - 9 = Reserved for future use

 $\mathbf{d} = Options$

0 = No options

ee and ff = connector types:

01 = TNC Female 14 = N-Type Female **

xx = no connector

** Premiums apply. Please check with your Distributor.

NOTE: ff defines a second connector (requiring a custom base to be ordered)

At this time, ff defaults to "xx"

gg = radome:

01 = White Conical 11 = White Flat top

Example:

33-605000-01-xx-11 Is an antenna which covers all GNSS frequencies + L-Band, provides,

50 dB of gain, uses a standard base, has one TNC female connector

and a white flat top radome.

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For the **TW7000** Family of Products



Part Number Structure:

Valid Connectors

Without Cable:

07 = SMA female (jack) bulkhead

With Cable (max length 5m):

 $00 = SMA ext{ straight male (plug)}$ $10 = SMA ext{ Right Angle **}$ $20 = SMA ext{ Female}$ $01 = TNC ext{ female}$ $11 = Reverse ext{ polarity SMA**}$ $22 = R/A ext{ QMA**}$ 23 = SMP** 23 = SMP** $24 = SMC ext{ Male}$

04 = SMB straight male (plug)

05 = MCX right angle male (plug)

06 = MMCX right angle male (plug)

15 = TNC male (plug)

25 = SMC Straight Female

26 = SMB Straight Female

27 = MCX Female Straight

17 = BNC Male**

18 = FME**

29 = R/A SSMCX Plug **

18 = FME**

19 = MMCX Female

29 = R/A SSMCX Plug **

30 = SMB with Overmold**

33 = MMCX straight male **

34x = FAKRA (replace "x" with colour code)**

** Premiums apply. Please check with your Distributor

NOTE: To order any of the TW7000 antennas with NO MAGNETS, add "NM" after the Product (eg. 33-7970NM-00-3000). To add Adhesive Tape to the bottom of the same, add "AT" after the Product Name (eg. 33-7970AT-07). If you desire both, then use NMAT, eg. 33-7970NMAT-07.

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