



# RADIO FREQUENCY SYSTEMS

## BASE STATION ANTENNAS EMEA & APAC SELECTION GUIDE

Edition 2 / 7.2022



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## Introduction

Today, there are many base station antennas to choose from, but it's increasingly difficult to find antennas that combine all of the characteristics needed:

- High performance
- Compact size
- Low weight
- Low visual impact
- Low wind load
- Cost effective

Some antennas address one or two issues, but with considerable compromises in other areas.

RFS base station antennas are engineered from the ground-up to resolve the toughest physical and architectural challenges and to simplify sites with no compromises to performance.

## Optimize...everything

Our broad portfolio of base station antennas supports network technologies from 2G to 5G as well as emerging 8T8R technologies. We offer:

- Multiband antennas that provide the ultimate in space efficiency and flexibility.
- Single-band antennas that make it easy to add a new frequency or technology to a site.
- Standalone TDD and hybrid TDD/FDD antennas that make it easy to add a TDD layer to support 5G and TDD LTE.
- Tailored beamwidth antennas for the most unique coverage requirements and applications.
- Small Size antennas that increase capacity and coverage in dense urban environments.
- Application-specific antennas for broadcast, public safety and other specialized applications.

## Multi Band Antennas

With RFS multiband base station antennas, you can support multiple frequencies and multiple technologies in a single, compact antenna that reduces space requirements, site complexity, wind loading, and total cost of ownership.

You have complete flexibility to combine 2G, 3G, 4G and 5G frequencies as needed in antennas that provide up to 28 RF ports. With this future-ready approach, you can meet today's requirements and ensure you're ready to support new frequencies when they're available without the time, cost, space and effort required to add antennas.



**LINK TO MULTI BAND SPECIFICATIONS**



**LINK TO SINGLE BAND SPECIFICATIONS**

## Single-Band Antennas

With RFS single-band base station antennas, it's easy to introduce a new frequency or technology to a site. You don't have to replace existing antennas and you're not forced to combine technologies in cases where it doesn't make sense from a strategic, business or technical perspective.

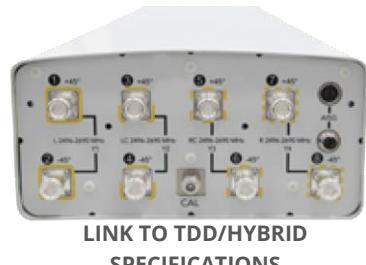
You can deploy a frequency and technology-specific antenna with up to 8 ports that meets your exact requirements. At the same time, you can leverage our antennas' excellent performance characteristics to ensure high-quality communications and features such as field-adjustable remote electrical tilt (RET) to fine-tune coverage.

## Standalone TDD and Hybrid TDD/FDD Antennas

With RFS TDD and hybrid TDD/FDD base station antennas, you can easily and efficiently add a TDD layer to your network to support critical network technologies, such as 5G and TDD LTE, with minimal impact at sites.

For maximum flexibility, we offer three approaches to TDD antennas:

- Deploy a standalone TDD antenna that's only 1 meter (3 ft) tall.
- Combine passive TDD and FDD technologies antenna in a single antenna with an optimized footprint.
- Deploy an RFS passive FDD antenna today, then seamlessly add active TDD technology when the time is right with no impact on antenna footprint or performance.



## Tailored Beamwidth Antennas

With RFS tailored beamwidth base station antennas, you can meet unique, location-specific coverage requirements for any application. Our comprehensive portfolio includes:

- Narrow-beam antennas with 30° to 45° horizontal beamwidth
- Dual-beam (split beam) antennas with 2 consistent-width horizontal beams
- Wide-beam antennas with 90° horizontal beamwidth
- Omni-beam antennas with 360° horizontal beamwidth



## Small Size Antennas

With RFS small-size base station antennas, you can optimize coverage and capacity in 2G, 3G, 4G and 5G networks in dense urban environments. We offer antennas ranging in size from 30 cm to 90 cm (1 ft to 3 ft) to support the most space-constrained deployments.

Our lightweight and versatile small cell base station antennas can be used in neutral-host networks and shared-infrastructure deployments to keep costs down and address property owners' concerns about the aesthetics of large numbers of antennas.

## Application-Specific Antennas

With RFS application-specific base station antennas, you can support frequency bands, such as UHF and VHF, which are used in the broadcast industry, as well as industry radio standards, such as Terrestrial Trunked Radio (TETRA). You can also extend coverage to rural areas and support applications that require a customized antenna configuration, such as tri-sector antennas that combine multiple antennas within a single cylindrical shroud. With our broad antenna portfolio, we can provide antennas for even the most unique and niche applications.

## Accessories

RFS offers a complete portfolio of accessories to support base station antenna deployments in any location, for any application. RFS portfolio includes various types of RET devices, antenna mounting hardware, antenna tilt sensor devices and portable tilt controller devices.

## Testing and Quality Assurance

Every RFS base station antenna undergoes rigorous testing and validation to ensure it provides the highest possible performance throughout its lifetime.

All RFS antennas comply with the BASTA standards recommended by the Next Generation Mobile Network (NGMN) Alliance for base station antennas. BASTA values are available for all RFS antennas upon request.

### Testing facilities in the U.S., France and China

We have outdoor testing facilities in Lannion, France. We also have indoor testing facilities in Shanghai, China, Meriden, and Lannion, with advanced technology for near and far-field test ranges to recreate the wide variety of outdoor conditions.

#### Our base station antennas undergo 100% production testing on:

- VSWR
- Isolation
- PIM

*We welcome our customers for benchmarking testing at any of our facilities.*

### Adherence to key industry specifications

Our base station antennas adhere to the ETSI 300 019-2 series specifications:

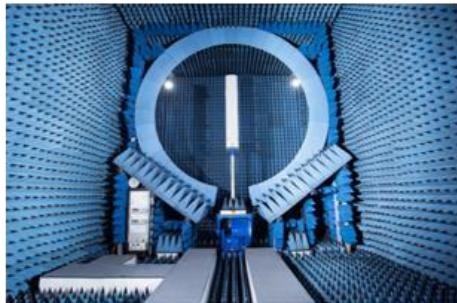
- Operation: EN 300 019-2-4: Class T4-1 E: Non-Weather Protected Locations – Extended
- Storage: EN 300 019-2-1: Class T1.2: Weather Protected Locations – not temperature controlled
- Transportation: EN 300 019-2-2: Class T2.2: Careful Transportation Class T2.3: Public Transportation
- Environmental: EN 300 019-1-4 Class 4.1 E: Non-Weather Protected Locations – Extended

To ensure reliable performance in harsh conditions for many years, our antennas also adhere to the following environmental specifications:

- Temperature: IEC 600-68-2-14 Test Nb
- Dry heat: IEC 600-68-2-2 Test Bb
- Cold: IEC 600-68-2-1 Test Ab
- Humidity: IEC 600-68-2-78 Test Cab
- Rain: IEC 600-68-2-18 Test Rb
- Salt mist: ISO 9227:2006
- Sinusoidal vibration: IEC 600-68-2-6
- Shock and bump: IEC 600-68-2-29
- Free fall: IEC 600-68-2-31
- UV: ISO 4892-2A

Finally, we apply additional system reliability stress tests, including:

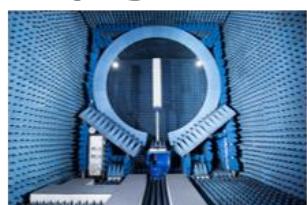
- Wind load testing
- Highly accelerated life tests (HALT)
- Climatic chamber testing
- Mean operations between failure (MOBF)
- End-of-life testing across each product's specified temperature range

**Antenna Pattern****Climatic****Free Fall****Vibration****Salt Spray****Rain**

## Production Tests - 100%

**VSWR & Isolation****Dynamic Intermodulation Testing**

## Sampling Tests

**Pattern****Vibration****Climatic****Pattern**

## How to find antenna in catalog

### Table of content

You can search for an antenna in table of content section looking for matching family, frequency bands and number of ports

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8 Ports (1Lf2H) .....	34
8 Ports (2L2H) .....	35
10 Ports (1L4H) .....	36

Once you have identified product you are then directed to Antenna Specifications section as below where you can :

- check key specifications in the table
- navigate back to antenna array configuration section by clicking on Array Type hyperlink
- access product datasheet on RFS website by clicking on antenna model name hyperlink

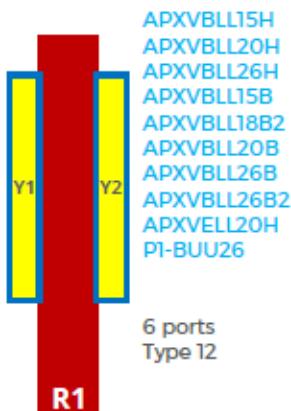
#### 6 Ports (1L2H)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVBILL15H_43-C-I20	694-960 1695-2690	65	15.6 18.3	2-14 2-12	6x 4.3-10	3	1498 x 398 x 158	20.5	Type12
APXVBILL20H_43-C-I20	694-960 1695-2690	65	16.5 18.3	2-12 2-12	6x 4.3-10	3	1998 x 378 x 158	25	Type12
APXVELL20H_43-C-I20 APXVELL20H_43-C	694-960 1695-2690	65	16.5 18.3	2-12 2-12	6x 4.3-10	3 0	1998 x 378 x 158	25	Type12

At any time, you can come back to Table of Content by clicking on Content hyperlink in each footer page.

## Antenna Array Configuration

You can search for an antenna in Antenna Array Configuration section looking for matching family, frequency bands and number of ports



Once you have identified product by clicking on model name hyperlink you are then directed to Antenna Specifications section as below where you can :

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<a href="#">APXVBLL15H_43-C-I20</a>	694-960 1695-2690	65	15.6 18.3	2-14 2-12	6x 4.3-10	3	1498 x 398 x 158	20.5	Type12
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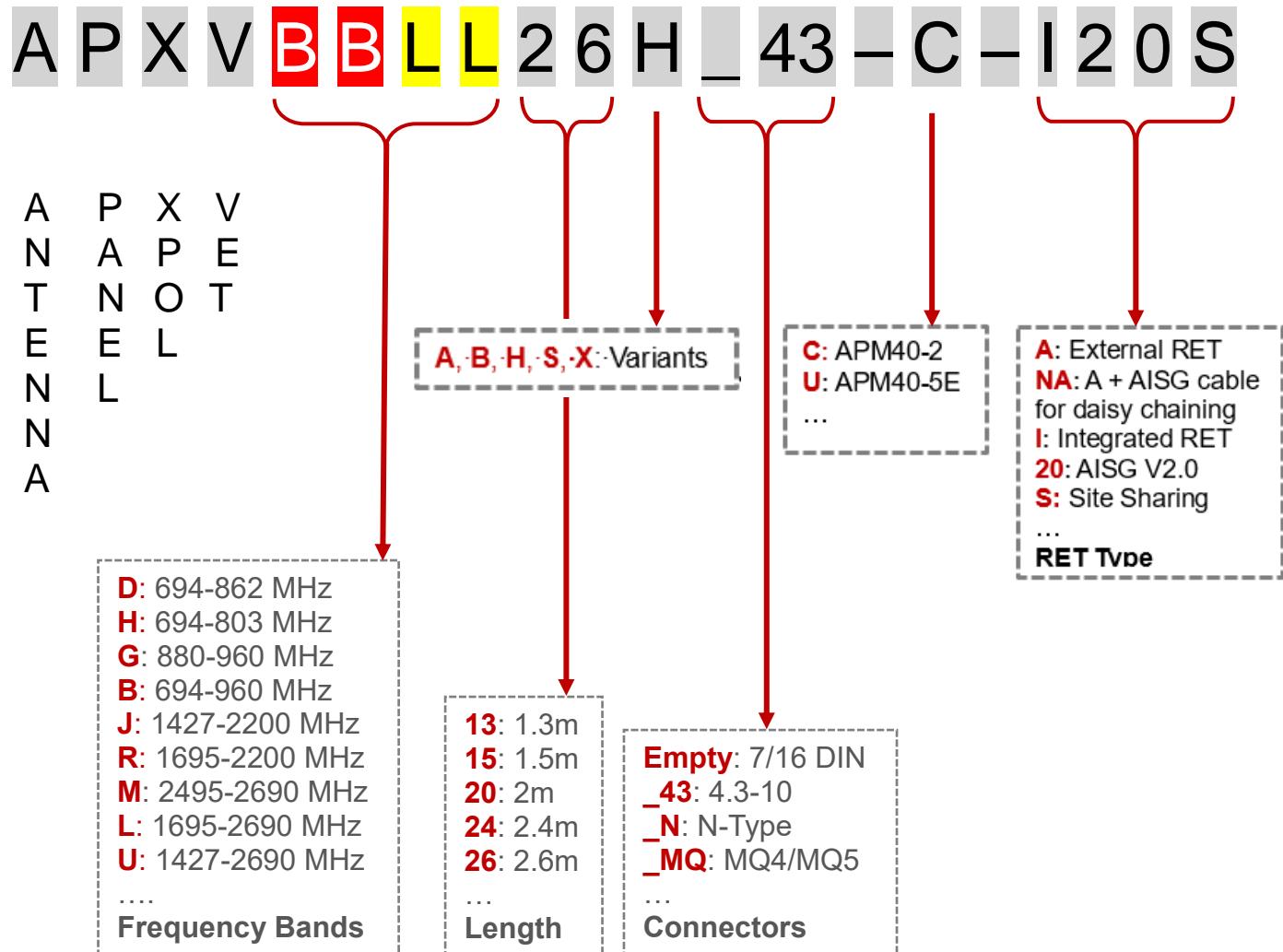
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At any time, you can come back to Table of Content by clicking on Content hyperlink in each footer page.

## Antenna Naming Convention

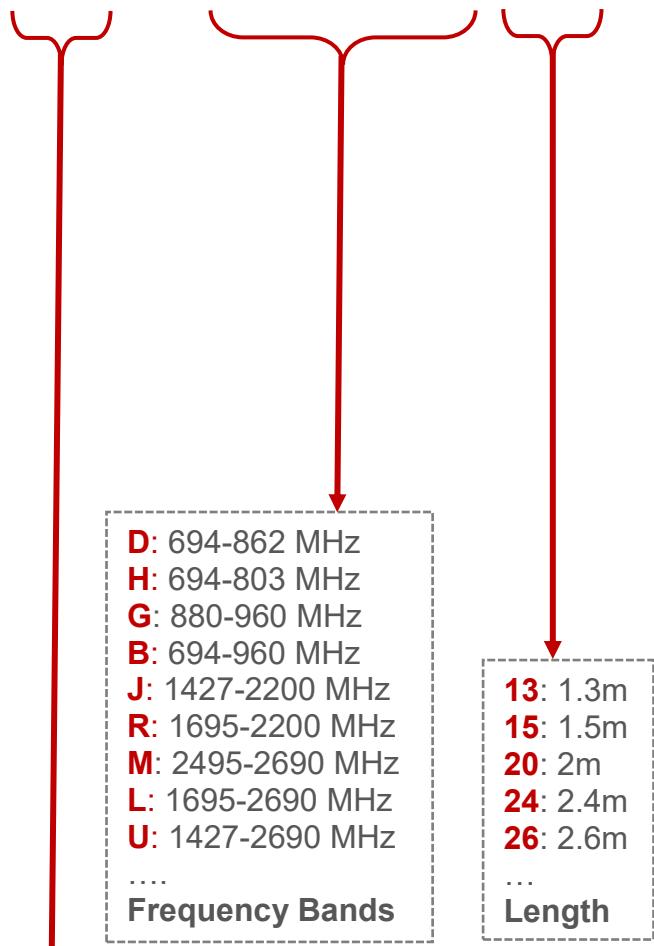
Type 1



## Antenna Naming Convention

Type 2

P 3 - BB BUU 26 - 10



Suffix-1	Polarization	Tilt	RET Position
A or X	X-Pol	Variable	External
B or V	V-Pol	Any	Any
F or T	X-Pol	Fixed	no RET
I or N	X-Pol	Variable	Integrated
S	X-Pol	Variable	Site sharing

P	1	1-column low band (any number and configuration of high band columns)
P	2	2 columns low band & up to 2 columns high band side-by-side
P	3	2 columns low band and 3 columns high band side-by-side
P	4	2 columns low band and 4 columns high band side-by-side
P	H	High band Only (ex: LLL, LLLL, LL, etc)
F	T	Hybrid FDD/TDD
S	O	Small Size Omni
S	P	Small Size Panel
S	H	Small Size hybrid beam (Omni + Panel)
N	B	Narrow Beam (below 33deg HBW)
B	3	Antenna with 33deg HBW (excluding the Twin Beam)
B	4	45deg beam
M	B	Multi-Beam (including the Twin-Beam)
W	B	Wide Beam (> 65deg, < 360deg)
H	B	Macro Antenna Hybrid HBW65 & others HBW (33deg, etc) (or hybrid Omni+Panel)
M	O	Macro antenna, Omni directional
T	D	Pure TDD (excluding beamforming)
B	F	Standalone beamforming
C	3	Tri-sector

## Antenna Naming Convention

### Frequency Bands Table

Sub-1 GHz				
CODE	Lower Edge		Upper Edge	Unit
	from	- to	from	to
A	555	- 617	746	- 894 MHz
H	690	- 698	797	- 806 MHz
D	690	- 698	862	- 862 MHz
F	690	- 698	894	- 906 MHz
B	690	- 698	960	- 960 MHz
N	790	- 862	862	- 862 MHz
E	790	- 880	960	- 960 MHz
S	806	- 817	869	- 990 MHz
C	806	- 824	894	- 894 MHz
I	824	- 862	960	- 960 MHz
G	862	- 880	960	- 960 MHz
V	555	- 617	960	- 960 MHz

1-3 GHz				
CODE	Lower Edge		Upper Edge	Unit
	from	- to	from	to
K	1400	- 1427	1500	- 1518 MHz
J	1400	- 1427	2170	- 2400 MHz
U	1400	- 1427	2690	- 2700 MHz
Q	1690	- 1710	1880	- 1880 MHz
R	1690	- 1710	2170	- 2200 MHz
L	1690	- 1710	2690	- 2700 MHz
W	1690	- 2305	2360	- 2400 MHz
P	1800	- 2010	1920	- 2025 MHz
M	2300	- 2575	2620	- 2700 MHz

> 3 GHz				
CODE	Lower Edge		Upper Edge	Unit
	from	- to	from	to
Y	3300	- 3600	3700	- 4900 MHz
Z	5000	- 5150	5800	- 7000 MHz

## Antenna Color Coding

### AISG Frequency Color

Upper Band Edge Range	RAL Code of the Colour	Band Colour	Band Character
380 MHz - 1000 MHz	RAL 3020	Red	R
1001 MHz - 1700 MHz	RAL 6029	Green	G
1701 MHz - 2300 MHz	RAL 5015	Blue	B
2301 MHz - 3000 MHz	RAL 1023	Yellow	Y
3001 MHz - 5000 MHz	RAL 4006	Purple	P
5001 MHz - 6000 MHz	RAL 2009	Orange	O

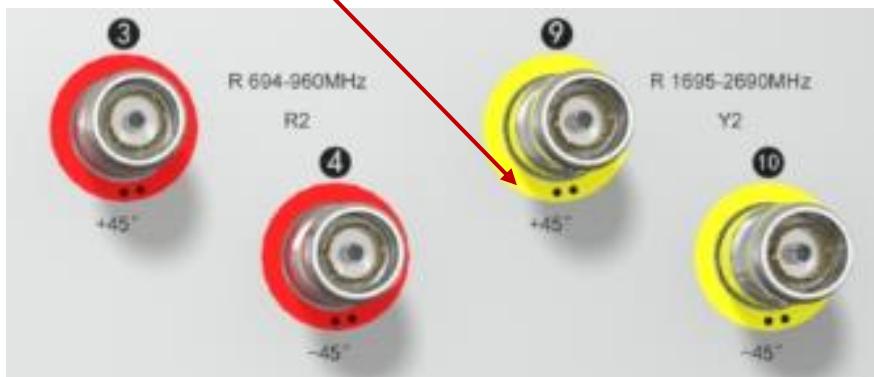
### AISG Port Color – Type 1

Antenna APXVBBL26H2\_43-C-I20S



Color to indicate Port Frequency Band

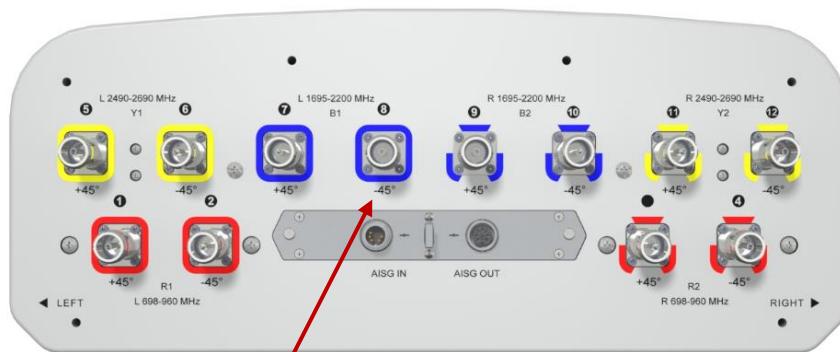
Dots to indicate the number of arrays



## Antenna Color Coding

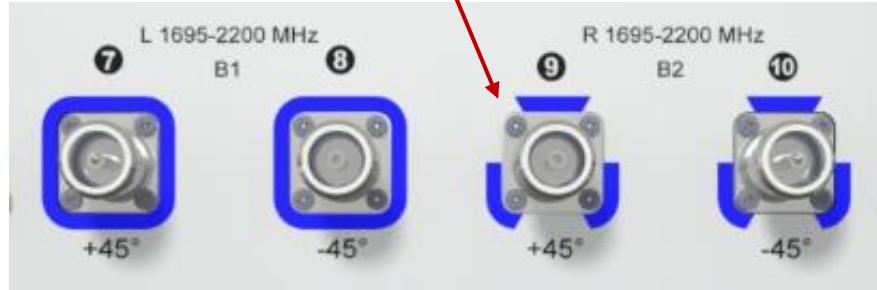
### AISG Port Color – Type 2

**Antenna P2-BBRRMM15-N0**



**Color to indicate Port Frequency Band**

**Segments to indicate the number of arrays**



## Antenna Array Configuration

### Single Band

 APXVB26B  
APXVB20B  
APXVB15B  
APXVE26B  
P1-X20-T1

2 ports  
Type 1

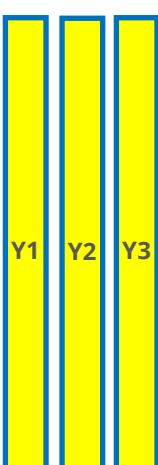
R1

 Y1 APXVL14B  
APXVL20B  
APXVR14B

2 ports  
Type 2

 Y1 Y2 APXVRR13B  
APXVRR14H  
APXVLL14H  
APXVLL15B  
APXVLL15V  
APXVLL19P  
APXVLL21B

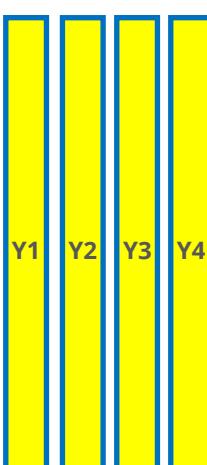
4 ports  
Type 3

 Y1 Y2 Y3 APXVLL15B

6 ports  
Type 4

 Y1 Y2 APXVRRMM15B  
APXVRRMM15H

8 ports  
Type 6

 Y1 Y2 Y3 Y4 APXVLLL15B2  
APXVLLL21B

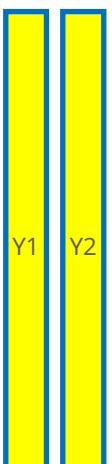
8 ports  
Type 5

 Y1 Y2 Y3 APXVLRRMM15B

10 ports  
Type 62

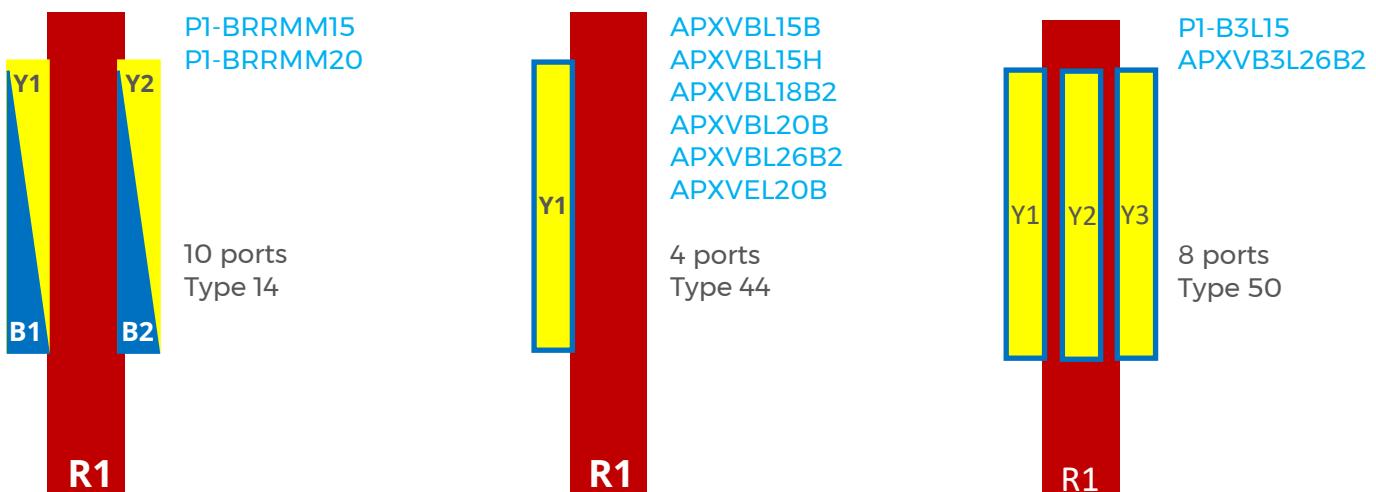
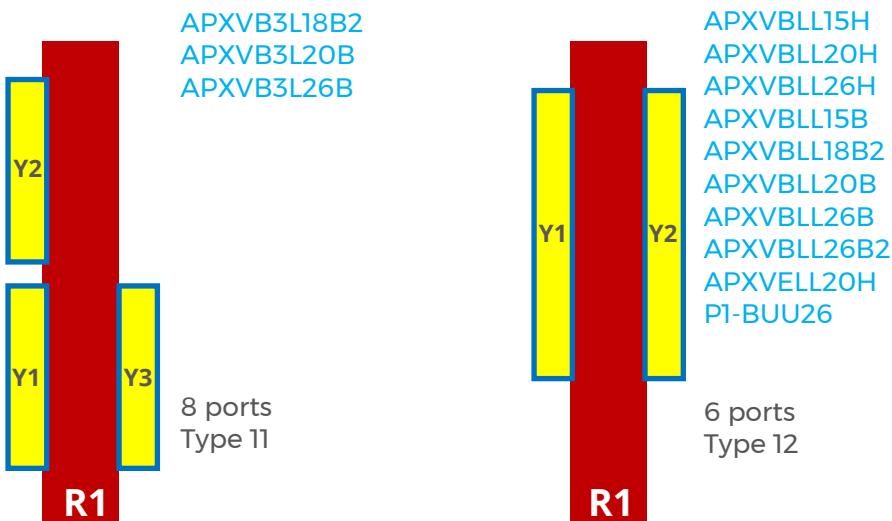
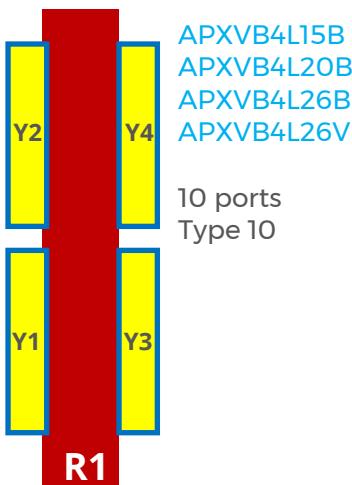
 P1 P2 PH-YY10

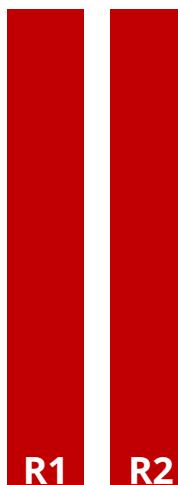
4 ports  
Type 7

 Y1 Y2 PH-LYY15

8 ports  
Type 63

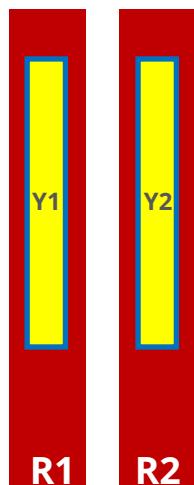
P1 P2

**P1 Platform**


**P2 Platform**

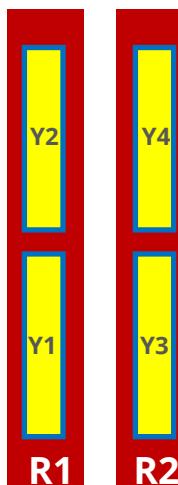
APXVBB15B  
APXVBB20B  
APXVBB26B  
APXVBB26H2

4 ports  
Type 16



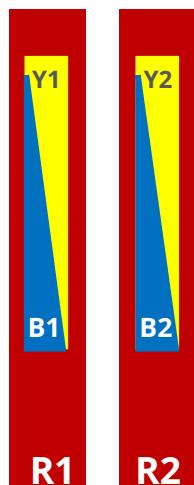
APXVBBLL15H2  
APXVBBLL15B  
APXVBBLL20B  
APXVBBLL20H2  
APXVBBLL26H2  
APXVBBLL26B  
P2-BBUU26

8 ports  
Type 17



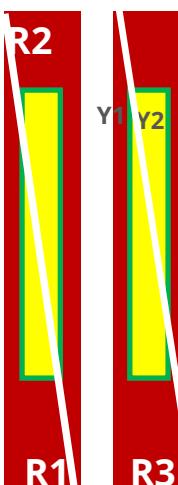
APXVBB4L15B  
APXVBB4L20B  
APXVBB4L26B  
APXVBB4L26H2  
P2-BB4U26

12 ports  
Type 18



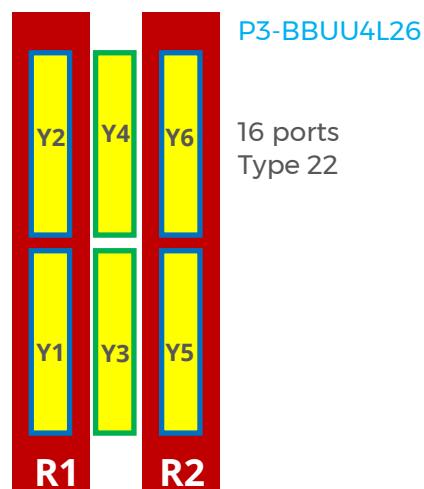
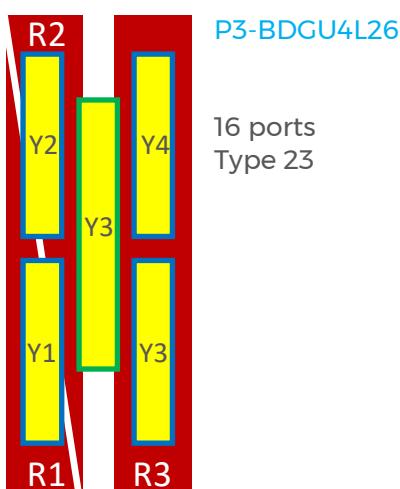
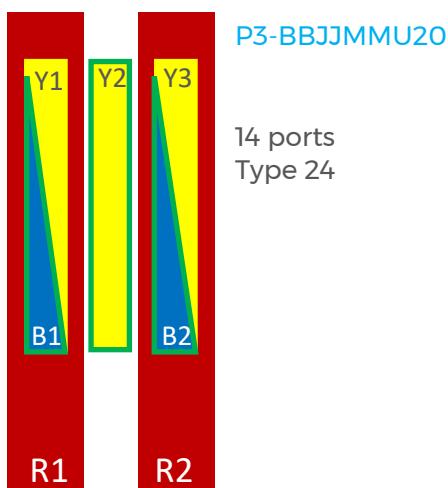
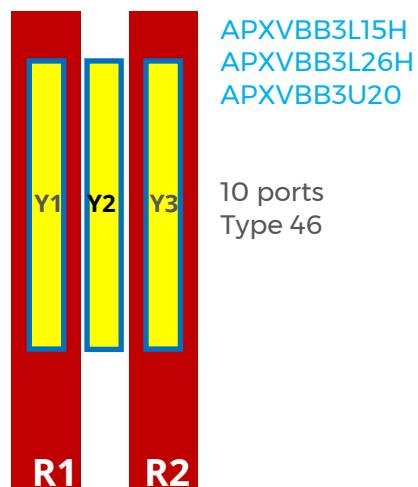
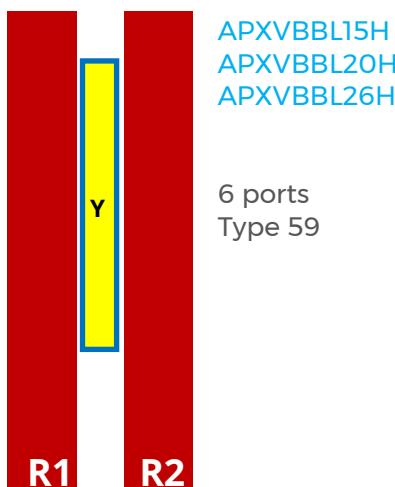
P2-BBRRMM15

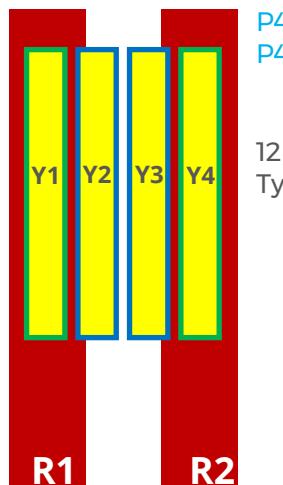
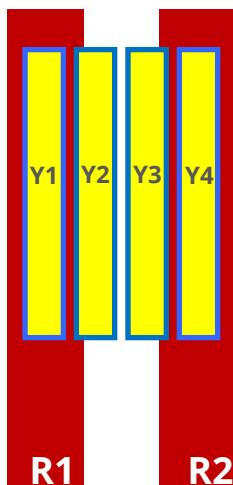
12 ports  
Type 19

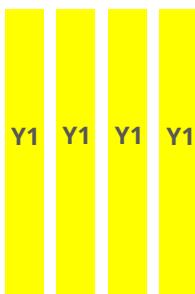
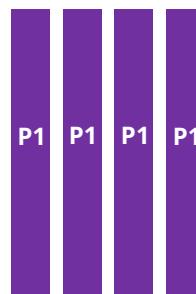
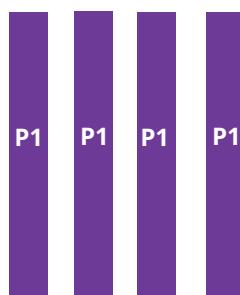
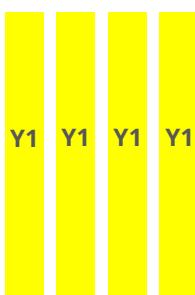


P2-BDGUU26

10 ports  
Type 20

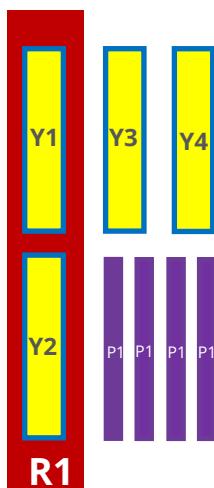
**P3 Platform**


**P4 Platform**

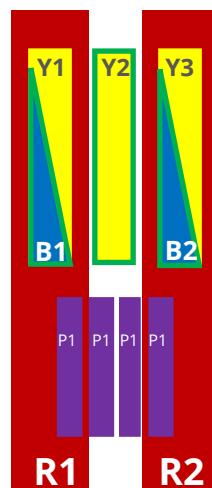
**8T8R Platform**APXVTM15AB  
APXV9TM138 ports  
Type 28APXVTY10AB  
APXV9TY10AB8 ports  
Type 29

APXVTMTY15AB

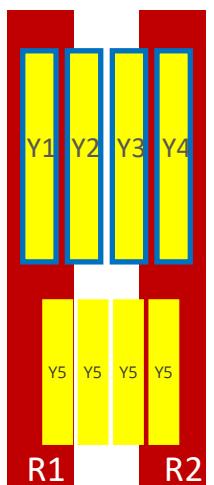
16 ports  
Type 30

**FDD/TDD Platform**


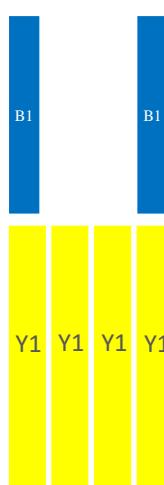
APXVB4LTY14AB  
APXVB4LTY16AB  
18 ports (10+8)  
Connectors MQ4/MQ5  
Type 32



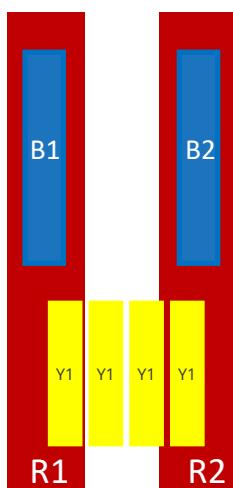
FT-BBJJMMUTY23  
22 ports (14+8)  
Connectors MQ4/MQ5  
Type 35



FT-BB4LTM26  
20 ports (12+8)  
Connectors MQ4/MQ5  
Type 66

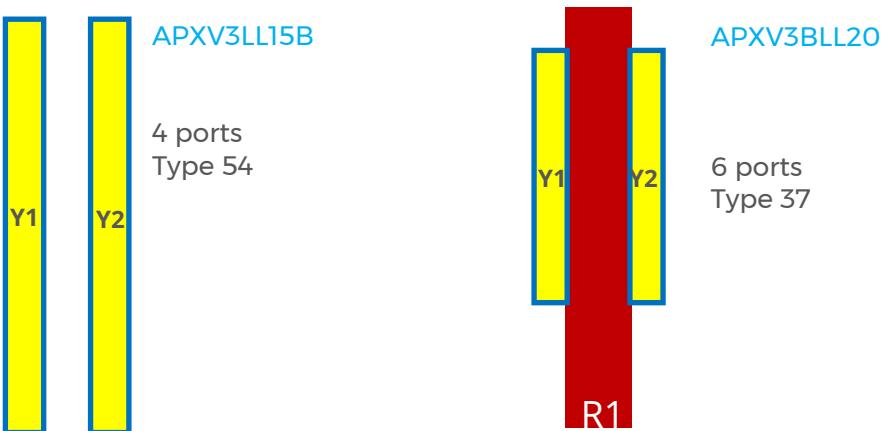
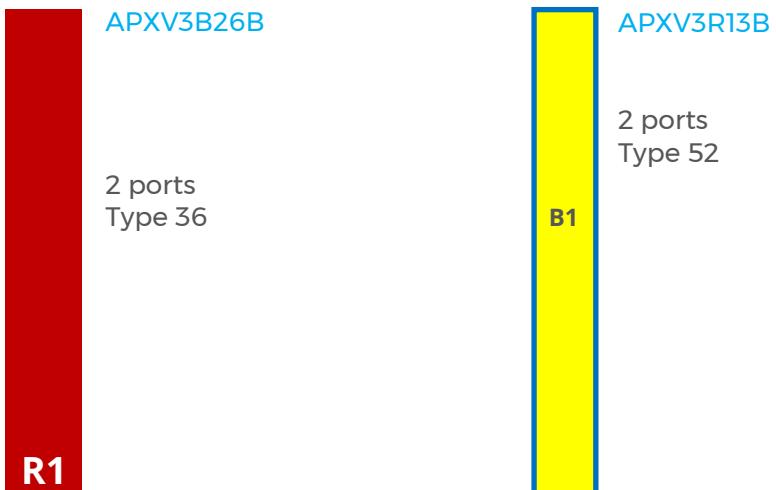


APXVLLTM15AB  
12 ports (4+8)  
Connectors 4.3-10  
Type 64



APXVHHRRTM15AB  
APXVHHRRTM20AB  
16 ports (8+8)  
Connectors 4.3-10  
Type 68

33°

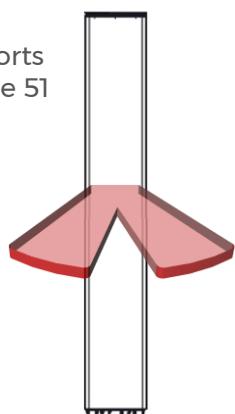
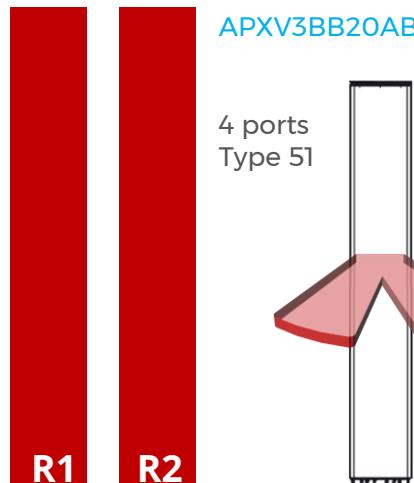
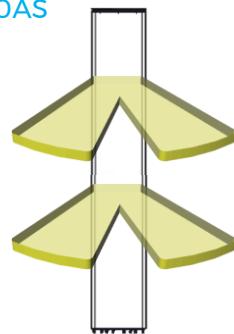
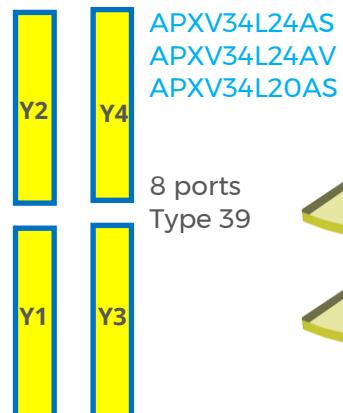
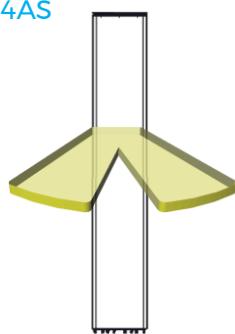
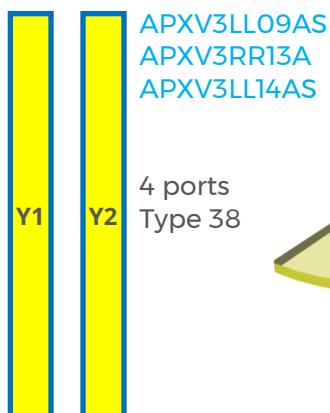


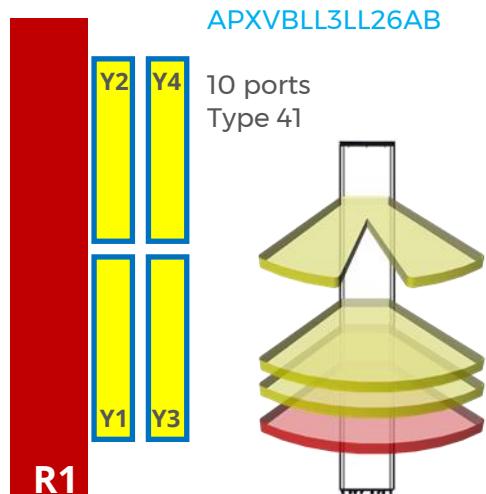
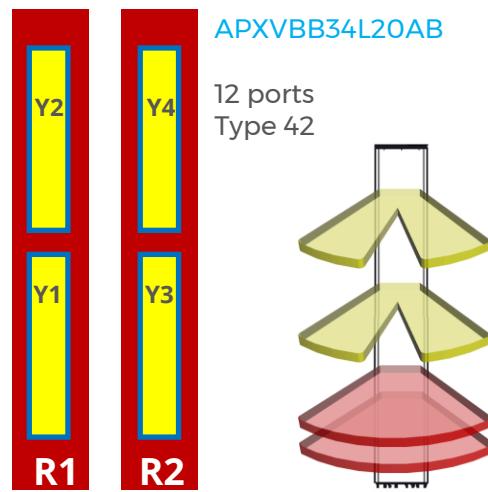
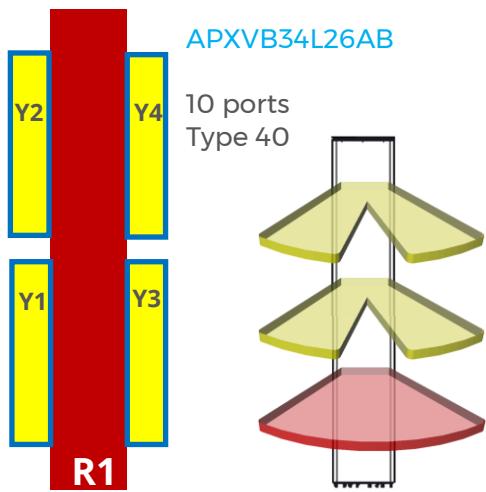
90°

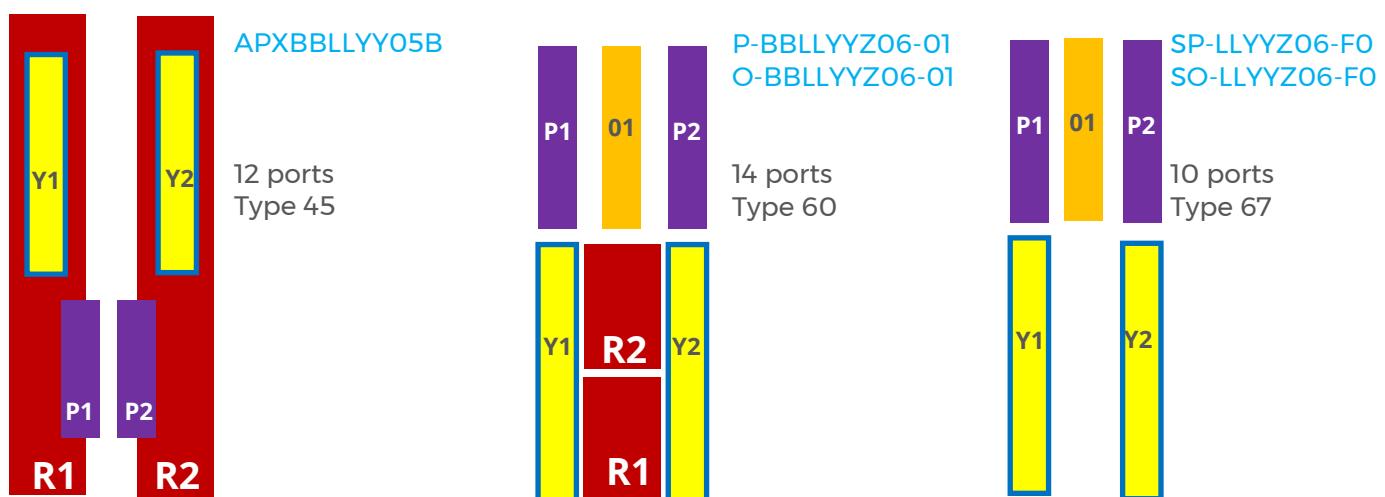
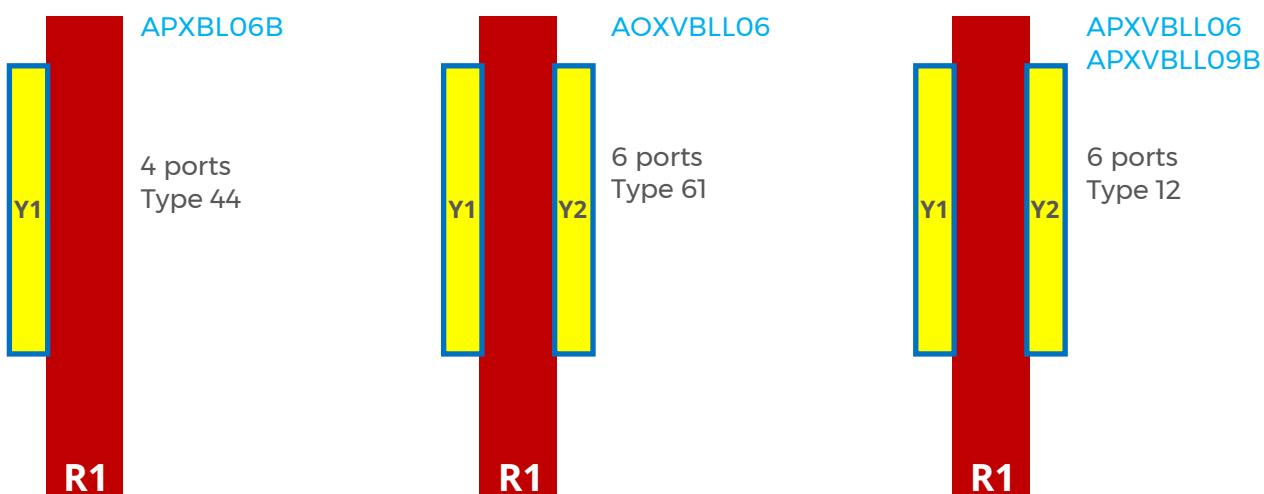


APXV18-209014  
APXV18-209015

2 ports  
Type 55

**Dual Beam**

**Hybrid Beam**

**Small Size**


## Single Band Antenna Low Band

**694-960 MHz**

### 2 Ports (1L)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVB15B_43-C-I20 APXVB15B-C-I20	698-960	65	15.2	2-15	2x 4.3-10 2x 7/16	1	1495 x 320 x 140	15.5	Type1
APXVB20B_43-C-I20 APXVB20B-C-I20	698-960	65	17	2-12	2x 4.3-10 2x 7/16	1	1980 x 320 x 140	18.5	Type1
APXVB26B_43-C-I20 APXVB26B-C-I20	698-960	65	17.7	2-12	2x 4.3-10 2x 7/16	1	2550 x 320 x 140	28.5	Type1
APXVE26B_43-C-I20 APXVE26B_43-C	790-960	65	17.7	2-12	2x 4.3-10 2x 7/16	1 0	2550 x 320 x 140	28.5	Type1
P1-X20-T1	410-470	65	15.3	Fixed 0	2x 4.3-10	0	2100 x 499 x 199	25	Type1

### 4 Ports (2L)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVBB15B_43-C-I20	698-960	65	16.1	2-15	4x 4.3-10	2	1590 x 499 x 199	24.5	Type16
APXVBB20B_43-C-I20 APXVBB20B-C-I20	698-960	65	16.1	2-12	4x 4.3-10 4x7/16	2	1990 x 499 x 199	34	Type16
APXVBB26B_43-C-I20 APXVBB26B-C-I20	694-960	65	17.4	2-12	4x 4.3-10 4x7/16	2	2690 x 499 x 199	38	Type16
APXVBB26H2_43-C-I20	698-960	65	16.8	0-10	4x 4.3-10	2	2498 x 469 x 205	32	Type16

## Single Band Antenna High Band

**1695-2690 MHz | 3300-3800 MHz**

### 2 Ports (1H)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVL14B_43-C-I20	1710-2700	65	18.3	2-12	2x 4.3-10	1	1390x 160 x 115	11.5	Type2
APXVL20B_43-C-I20	1710-2700	65	19.4	0-6	2x 4.3-10	1	2000 x 160 x 115	11.5	Type2
APXVR14B_43-C-I20 APXVR14B_43-C	1710-2180	65	17.8	2-12	2 x 4.3-10 2 x 7/16	1 1	1390x 160 x 115	11.5	Type2

### 4 Ports (2H)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVLL14H_43-C-I20 APXVLL14H-C-I20	1710-2690	65	18.4	0-10	4x 4.3-10 4 x 7/16	2 2	1378 x 258 x 88	10.4	Type3
APXVLL15B_43-C-I20 APXVLL15B_43-C APXVLL15B-C-I20 APXVLL15B-C	1710-2690	65	18.4	2-12	4x 4.3-10 4x 4.3-10 4x 7/16 4x 7/16	2 0 2 0	1498 x 320 x 123	15.3	Type3
APXVLL15V_43-C-I20 APXVLL15V-C-I20	1710-2690	65	18.4	0-10	4x 4.3-10 4x 7/16	2 2	1498 x 320 x 123	15.3	Type3
APXVLL19P_43-C-A20	1695-2690	65	19.4	0-12	4x 4.3-10	2	1925 x 288 x 118	18.6	Type3
APXVLL21B_43-C-I20	1710-2690	65	20	2-10	4x 4.3-10	2	2090 x 320 x 123	22.3	Type3
APXVRR13B-C-A20	1710-2170	65	17.4	0-10	4 x 7/16	2	1200 x 290 x 139	12	Type3
APXVRR14H_43-C-I20 APXVRR14H-C-I20	1710-2170	65	18.5	0-10	4x 4.3-10 4 x 7/16	2	1378 x 258 x 88	10	Type3

**SINGLE BAND HIGH BAND ANTENNA CONTINUED**
**4 Ports (2H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
PH-YY10-N0	3300-3800	65	17.9	2-12	4x 4.3-10	2 0	980 x 220 x 120	6.4	Type7

**6 Ports (3H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVLLL15B_43-C-I20 APXVLLL15B-C-I20	1710-2690	65	18.9	2-12	6x 4.3-10 6x 7/16	3	1486 x 428 x 145	21.9	Type4

**8 Ports (4H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVLLL15B2_43-C-I20	1710-2690	65	18.7	2-12	8x 4.3-10	4	1490 x 499 x 199	24.1	Type5
APXVLLLL21B_43-C-I20	1710-2690	65	20.2	0-6	8x 4.3-10	4	2090 x 499 x 199	35	Type5
PH-LYY15-N0	1710-2690 3300-3800	65	18.8 17.8	2-12 2-12	8x 4.3-10	4	1498 x 450 x 145	21	Type63

**8 Ports (2Hf)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVRRMM15B_43-C-I20 APXVRRMM15B-C-I20	1695-2200 2490-2690	65	17.4 18.0	2-12 2-12	8x 4.3-10 8 x 7/16	4	1499 x 350 x 200	20.3	Type6
APXVRRMM15H_43-C-I20	1695-2200 2490-2690	65	17.7 17.9	2-12 2-12	8 x 4.3-10	4	1398 x 278 x 168	17.5	Type6

**10 Ports (1H2Hf)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVLRRMM15B_43-C-I20	1710-2200 2490-2690 1710-2690	65	17.6 18.5 19.4	2-12 2-12 2-12	10 x 4.3-10	5	1490 x 429 x 199	21.8	Type62

## Multi Band Antenna

690–960 MHz | 1427–2690 MHz

### 4 Ports (1L1H)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVBL15B_43-C-I20 APXVBL15B-C-I20	698-960 1710-2690	65	15.3 17.2	2-15 2-11	4x 4.3-10 4 x 7/16	2	1495 x 350 x 200	16.2	Type44
APXVBL15H_43-C-I20 APXVBL15H_43-C	694-960 1695-2690	65	16.0 19.0	2-14 2-12	4x 4.3-10	20	1498 x 398 x 158	20.5	Type44
APXVBL18B2_43-C-I20 APXVBL18B2_43-C	698-960 1710-2690	65	15.3 19.1	2-15 2-12	4x 4.3-10	20	1795 x 350 x 200	18.2	Type44
APXVBL20B_43-C-I20 APXVBL20B-C-I20 APXVBL20B-C APXVBL20B_43-C	690-960 1695-2690	65	16.7 17.4	2-12 2-11	4x 4.3-10 4 x 7/16	2200	1960 x 350 x 200	22.5	Type44
APXVBL26B2_43-C-I20 APXVBL26B2_43-C	698-960 1710-2690	65	17.3 18.8	2-10 2-10	4x 4.3-10	20	2690 x 350 x 200	28.4 27.9	Type44
APXVEL20B_43-C-I20	790-960 1710-2690	65	16.0 18.0	2-12 2-12	4x 4.3-10	2	1960 x 350 x 200	22.5	Type44

### 6 Ports (1L2H)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVBL15H_43-C-I20	694-960 1695-2690	65	15.6 18.3	2-14 2-12	6x 4.3-10	3	1498 x 398 x 158	20.5	Type12
APXVBL20H_43-C-I20	694-960 1695-2690	65	16.5 18.3	2-12 2-12	6x 4.3-10	3	1998 x 378 x 158	25	Type12
APXVELL20H_43-C-I20 APXVELL20H_43-C	694-960 1695-2690	65	16.5 18.3	2-12 2-12	6x 4.3-10	30	1998 x 378 x 158	25	Type12
APXVBL26H_43-C-I20	690-960 1695-2690	65	17.8 18.0	2-12 2-12	6x 4.3-10	3	2498 x 378 x 158	28.7	Type12
APXVBL15B_43-C-I20 APXVBL15B-C-I20 APXVBL15B_43-C	698-960 1710-2690	65	14.7 18	2-15 2-11	6x 4.3-10 6x 7-16	330	1495 x 350 x 200	18.5	Type12

## MULTI BAND ANTENNA CONTINUED

**6 Ports (1L2H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVBL18B2_43-C-I20 APXVBL18B2_43-C	698-960 1695-2690	65	16.4 19.7	2-12 2-10	6x 4.3-10	30	1798 x 378 x 158	23.5	Type12
APXVBL20B_43-C-I20 APXVBL20B-C-I20 APXVBL20B_43-C	698-960 1710-2690	65	15.8 18 18	2-12 2-11 2-11	6x 4.3-10 6x 7-16	330	1960 x 350 x 200	24.5	Type12
APXVBL26B-C-I20 APXVBL26B_43-C-I20 APXVBL26B_43-C	698-960 1710-2690	65	17.7 18.1	2-11 2-11	6x 4.3-10	330	2690 x 350 x 200	31.5	Type12
APXVBL26B2_43-C-I20 APXVBL26B2_43-C	690-960 1695-2690	65	17.7 18.7	2-12 2-10	6x 4.3-10	30	2690 x 380 x 156	28.5	Type12
P1-BUU26-N0	694-960 1427-2690	65	17.0 17.8	2-12 2-12	6x 4.3-10	3	2498 x 378 x 158	32	Type12

**6 Ports (2L1H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVBBL15H_43-C-I20	690-960 1695-2690	65	15.4 18.2	2-12 2-12	6x 4.3-10	3	1498 x 468 x 168	21	Type59
APXVBBL20H_43-C-I20	690-960 1695-2690	65	16.7 18.8	2-12 2-12	6x 4.3-10	3	1998 x 468 x 168	25.5	Type59
APXVBBL26H_43-C-I20	690-960 1695-2690	65	17.3 18.8	2-12 2-12	6x 4.3-10	3	2498 x 468 x 168	31	Type59

## MULTI BAND ANTENNA CONTINUED

**8 Ports (1L3H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVB3L26B_43-C-I20 APXVB3L26B-C-I20 APXVB3L26B_43-C	690-960 1710-2690	65	17.3 17.9	2-12 2-11	8x 4.3-10 8 x 7/16	4 4 0	2690 x 350 x 200	32.5	Type11
APXVB3L26B2_43-C-I20 APXVB3L26B2_43-C	690-960 1695-2690	65	16.6 20.0	2-12 2-10	8x 4.3-10	4 0	2690 x 398 x 158	31.5	Type50
APXVB3L20B_43-C-I20 APXVB3L20B-C-I20	698-960 1710-2690	65	16.3 16.9	2-12 2-11	8x 4.3-10	4	1960 x 350 x 200	22.5	Type11
APXVB3L18B2_43-C-I20 APXVB3L18B2_43-C	690-960 1695-2690	65	16.0 20.4	2-12 2-10	8x 4.3-10	4 0	1798 x 398 x 158	27	Type11
P1-B3L15-N0	698-960 1695-2690	65	15.4 18.1	2-12 2-12	8x 4.3-10	4	1498 x 398 x 158	22	Type50

## MULTI BAND ANTENNA CONTINUED

**8 Ports (2L2H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVBLL15B_43-C-I20	698-960 1710-2690	65	15.2 19.8	2-15 2-12	8x 4.3-10	4	1590 x 499 x 199	27	Type17
APXVBLL20B_43-C-I20	698-960 1710-2690	65	16.1 19.1	2-12 2-12	8x 4.3-10	4	2090 x 499 x 199	36	Type17
APXVBLL26B_43-C-I20	698-960 1710-2690	65	16.7 19.6	2-12 2-12	8x 4.3-10	4	2690 x 499 x 199	46.5	Type17
APXVBLL15H2_43-C-I20 APXVBLL15H2_43-C-I20S	690-960 1695-2690	65	15.9 18.0	2-12 2-12	8x 4.3-10	4	1498 x 469 x 205	25	Type17
APXVBLL20H2_43-C-I20 APXVBLL20H2_43-C-I20S	690-960 1695-2690	65	16.9 17.9	2-12 2-12	8x 4.3-10	4	1998 x 469 x 205	30	Type17
APXVBLL26H2_43-C-I20 APXVBLL26H2_43-C-I20S	690-960 1695-2690	65	17.1 17.6	2-12 2-12	8x 4.3-10	4	2498 x 469 x 205	34	Type17
P2-BBUU26-I0*	694-960 1427-2690	65	16.6 18.5	2-12 2-12	8x 4.3-10	4	2749 x 369 x 206	34.5	Type17

\* Please contact [RFS Technical Support](#) for more information on this product

**MULTI BAND ANTENNA CONTINUED**
**10 Ports (1L4H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVB4L26B_43-C-I20 APXVB4L26B_43-C-I20S APXVB4L26B-C-I20	698-960 1710-2690	65	17.1 18.2	2-11 2-11	10x 4.3-10 10 x 7/16	5	2690 x 350 x 200	34.5	Type10
APXVB4L26V_43-C-I20 APXVB4L26V-C-I20	698-960 1710-2690	65	17.1 18.2	0-10 0-10	10x 4.3-10 10 x 7/16	5	2690 x 350 x 200	34.5	Type10
APXVB4L15B_43-C-I20 APXVB4L15B-C-I20 APXVB4L15B_43-C	698-960 1710-2690	65	14.9 16.1	2-15 2-12	10x 4.3-10 10x 7/16	5 5 0	1495 x 350 x 200	20.9	Type10
APXVB4L20B_43-C-I20 APXVB4L20B-C-I20	698-960 1710-2690	65	16.3 17.1	2-12 2-10	10x 4.3-10 10x 7/16	5	1960 x 350 x 200	25	Type10

**10 Ports (1L1Lf2H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
P2-BDGUU26-I1	694-960 694-862 880-960 1427-2690	65	16.9 16.4 16.7 18.7	2-12 2-12 2-12 2-12	10x 4.3-10	5	2772 x 469 x 205	47	Type20

**10 Ports (1L2Hf)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
P1-BRRMM15-N0 P1-BRRMM15-S0	698-960 1695-2200 2490-2690	65	14.9 17.6 18.6	2-15 2-12 2-12	10x 4.3-10	5	1495 x 350 x 200	21	Type14
P1-BRRMM20-N0 P1-BRRMM20-S0	698-960 1695-2200 2490-2690	65	17 17.7 18.4	2-12 2-12 2-12	10x 4.3-10	5	1960 x 350 x 200	27.8	Type14

**MULTI BAND ANTENNA CONTINUED**
**10 Ports (2L3H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVBB3U20_43-C-I20	694-960 1427-2690	65	15.6 18.5	2-12 2-12	10x 4.3-10	5	2080 x 483 x 241	50	Type46
APXVBB3L15H_43-C-I20	690-960 1695-2690	65	15 18.1	2-12 2-12	10x 4.3-10	5	1498 x 468 x 168	24.5	Type46
APXVBB3L26H_43-C-I20 APXVBB3L26H-C-I20	690-960 1695-2690	65	17.1 19.6	2-12 2-10	10x 4.3-10 10x 7/16	5	2498 x 468 x 168	40	Type46

**12 Ports (2L4H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVBB4L15B_43-C-I20	698-960 1710-2690	65	15.2 16.9	2-15 2-12	12x 4.3-10	6	1495 x 499 x 199	29.1	Type18
APXVBB4L20B_43-C-I20	698-960 1710-2690	65	16.4 16.7	2-12 2-12	12x 4.3-10	6	2100 x 499 x 199	40.5	Type18
APXVBB4L26H2_43-C-I20 APXVBB4L26H2_43-C-I20S	690-960 1695-2690	65	17.2 18.1	2-12 2-12	12x 4.3-10	6	2750 x 469 x 205	39.5	Type18
APXVBB4L26B_43-C-I20	698-960 1710-2690	65	17.6 17.7	2-12 2-12	12x 4.3-10	6	2690 x 499 x 199	47.5	Type18
P2-BB4U26-I0*	694-960 1427-2690	65	16.6 18.5	2-12 2-12	12x 4.3-10	6	2749 x 369 x 206	38.5	Type18

\* Please contact [RFS Technical Support](#) for more information on this product

**MULTI BAND ANTENNA CONTINUED**
**12 Ports (2L4H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVBB4L15H2_43-C-I20	690-960 1695-2690	65	16 19.3	2-12 2-12	12x 4.3-10	6	1498 x 560 x 180	31.5	Type25
P4-BB4L15-N0	694-960 1695-2690	65	14.7 17.7	2-12 2-12	12x 4.3-10	6	1498 x 498 x 257	31.2	Type25
P4-BBUULL15-S1	694-960 1427-2690 1695-2690	65	15.1 18.0 18.6	2-12 2-12 2-12	12x 4.3-10	6	1498 x 498 x 257	30	Type26
P4-BBUULL15-I0*	694-960 1427-2690 1695-2690	65	14.8 18.2 17.7	2-12 2-12 2-12	12x 4.3-10	6	1500 x 430 x 220	31	Type26
P4-BBUULL20-I1*	694-960 1427-2690 1695-2690	65	15.4 18.4 17.7	2-12 2-12 2-12	12x 4.3-10	6	2100 x 430 x 220	38.5	Type26

\* Please contact [RFS Technical Support](#) for more information on this product

**MULTI BAND ANTENNA CONTINUED**
**12 Ports (2L2Hf)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
P2-BBRRMM15-N0	698-960		15.5	2-15					
P2-BBRRMM15-S0	1695-2200 2490-2690	65	18.2 18.2	2-12 2-12	12x 4.3-10	6	1590 x 498 x 197	29	Type19

**14 Ports (2L1H2Hf)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
P3-BBJJMMU20-I0	690-960 1427-2200 2490-2690 1427-2690	65	15.3 18.3 16.9 18.2	2-12 2-12 2-12 2-12	14x 4.3-10	7	2166 x 475 x 242	48	Type24

**16 Ports (2L6H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
P3-BBUU4L26-S0	694-960		16.8	2-12					
P3-BBUU4L26-N0	1427-2690 1695-2690	65	18.6 18.3	2-12 2-12	16x 4.3-10	8	2750 x 469 x 205	46.5	Type22

**16 Ports (2L2H2Hf)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
P4-BBRRMMUU15-S0	694-960		14.9	2-12					
P4-BBRRMMUU15-N0	1695-2200 2490-2690 1427-2690	65	17.3 18.2 18.0	2-12 2-12 2-12	16x 4.3-10	8	1498 x 498 x 257	32	Type27

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
P4-BBRRMMUU20-S0*	694-960 1695-2200 2490-2690 1427-2690	65	15.8 17.5 18.0 17.9	2-12 2-12 2-12 2-12	16x 4.3-10	8	1998 x 498 x 215	36	Type27

**16 Ports (1L1Lf5H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
P3-BDGU4L26-I0	694-960 694-862 880-960 1427-2690 1695-2690	65	17.0 15.9 16.3 18.9 18.7	2-12 2-12 2-12 2-12 2-12	16x 4.3-10	8	2790 x 475 x 242	58	Type23

\* Please contact [RFS Technical Support](#) for more information on this product

## TDD 8T8R Antenna

2300-2690 MHz | 3300-3800 MHz

### 8 Ports (4H)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVTY10AB_43-C-I20 APXVTY10AB_MQ-C-I20	3300-3800	90 65 20	16.9 16.9 21.3	2-12	8 x 4.3-10 2x MQ4/MQ5	4	1050 x 288 x 118	10.5	Type29
APXVTM15AB_43-C-I20 APXVTM15AB_MQ-C-I20	2300-2690	90 65 22	17.3 19.1 22.5	2-12	8 x 4.3-10 2x MQ4/MQ5	4	1550 x 320 x 145	24	Type28

### 8 Ports (4H 90°)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXV9TY10AB_43-C-I20 APXV9TY10AB_MQ-C-I20	3300-3800	90 65 21	16.4 17.6 21.3	2-12	8 x 4.3-10 2x MQ4/MQ5	4	1050 x 288 x 118	10.5	Type29
APXV9TM13_43-C-I20 APXV9TM13_CL-C-I20	2496-2690	90 65/90 22	17.0 18.4/17 21.9	0-9	8 x 4.3-10 2x MQ4/MQ5	4	1395 x 320 x 160	25	Type28

### 16 Ports (8H)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVTMTY15AB_MQ-C-I20	2300-2690	85	18.3	2-12	2x MQ4/MQ5	2	1550 x 499 x 199	33.2	Type30
		65 22	19.0 22.2						
	3300-3800	75	16.1	2-12					
		55 21	17.9 21.3						

**Multi Band + TDD 8T8R Antenna**

690-960 MHz | 1695-2690 MHz &amp; 2300-2690 MHz | 3300-3800 MHz

**12 Ports (2H + 4H TDD)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type			
APXVLLTM15AB_43-C-I20	1710-2170	65	17.5	2-12	4x 4.3-10	2	1490 x 560 x 180	28.8	Type64			
	2515-2675	75	16.1	2-12	8x 4.3-10	1						
		55	18.1									
		20	21.9									

**16 Ports (2L2H + 4H TDD)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type			
APXVHRRRTM15AB_43-C-I20	698-803	65	13.6	0-14 2-12	8x 4.3-10	5	1590 x 560 x 180	30.7	Type68			
	1710-2170	65	17.2									
	2515-2675	68	15.3	2-12	8x N	1						
APXVHRRRTM20AB_43-C-I20	698-803	65	15.2	2-12	10x 4.3-10	5	2090 x 560 x 180	41	Type68			
	1710-2170	65	18.2	2-12	8x N	1						
	2515-2675	65	16.6	2-12								
		50	18.0									
		20	21.3									

**18 Ports (1L4H + 4H TDD)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVB4LTY14AB_43MQ-C-I20	694-960	65	15.4	2-14 2-12	10x 4.3-10	5	1390 x 429 x 199	26.7	Type32
	1710-2690	65	16.3						
APXVB4LTY14AB_43MQ-C-I20S	80	80	15	2-12	MQ4/MQ5	1	1650 x 429 x 199	28	Type32
	3300-3800	65	16.2						
APXVB4LTY16AB_43-C-I20	21	21	20.4	2-14 2-12	10x 4.3-10	5	1650 x 429 x 199	28	Type32
	694-960	65	15.3						
	1710-2690	65	16.1						
	80	80	15.3	2-12	MQ4/MQ5	1			
	3300-3800	65	16.4						
		22	21.0						

**MULTI BAND + TDD 8T8R ANTENNA CONTINUED**
**20 Ports (2L4H + 4H TDD)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type			
FT-BB4LTM26-N0*	694-960	65	16.4	2-12	12x 4.3-10	6	2690 x 499 x 199	47.5	Type66			
	1710-2690		17.5	2-12								
FT-BB4LTM26-S0*	80	65	15.6	2-12	MQ4/MQ5	1						
	2300-2690		15.4									
		25	18.8									

**22 Ports (2L1H2Hf + 4H TDD)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type			
FT-BBJJMMUTY23-I0	690-960	65	15.6	2-12	14x 4.3-10	7	2300 x 475 x 225	54	Type35			
	1427-2200		17.9	2-12								
	2490-2690		16.9	2-12								
	1427-2690		18.6	2-12								
	90	65	16.3	2-12	MQ4/MQ5	1						
	3300-3800		17.0									
		25	20.5									

\* Please contact [RFS Technical Support](#) for more information on this product

## Special Beam Antenna Narrow Beam

698–960 MHz | 1695–2690 MHz

### 2 Ports (1L 33°)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXV3B26B_43-C-I20	698-960	33	20.9	2-12	2x 4.3-10	1	2530 x 565 x 145	31.2	Type36

### 2 Ports (1H 33°)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXV3R13B_43-H APXV3R13B_43-H-A20	1710-2170	33	19.4	0-10	2x 4.3-10	1	1200 x 290 x 139	15	Type52

### 4 Ports (2H 33°)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXV3LL15B_43-C-I20	1710-2690	33	22.1	2-12	4x 4.3-10	2	1498 x 499 x 199	26	Type54

### 6 Ports (1L2H 33°)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXV3BLL20B_43-C-I20	698-960 1710-2690	33	19.4 18.4	2-12	6x 4.3-10	2	2080 x 565 x 145	44	Type37

## Special Beam Antenna

### Dual Beam

**790-960MHz | 1710-2690 MHz**

#### 4 Ports (2L DB)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXV3BB20AB_43-C-I20*	694-960	33	19	2-12	4x 4.3-10	2	2070 x 585 x 155	31	Type51

#### 4 Ports (2H DB)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXV3LL14AS_43-C-I20 APXV3LL14AS_43-C	1710-2690	33	20.8	2-12	4x 4.3-10	2	1499 x 396 x 160	22.5	Type38
APXV3RR13A_43-C-A20	1710-2170	33	20.6	0-10	4x 4.3-10	2	1360 x 400 x 160	23.6	Type38
APXV3LL09AS_43-C-I20	1710-2170	33	19	2-12	4x 4.3-10	2	920 x 396 x 160	16	Type38

#### 8 Ports (4H DB)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXV34L20AS_43-C-I20	1710-2690	33	18.8	2-12	8x 4.3-10	4	2000 x 396 x 160	25	Type39
APXV34L24AS_43-C APXV34L24AS_43-C-I20	1710-2690	33	20.3	2-12	8x 4.3-10	0 4	2480 x 396 x 160	32	Type39
APXV34L24AV-C-I20 APXV34L24AV_43-C-I20	1710-2690	33	20.3	2-12	8x 4.3-10	4 4	2480 x 396 x 160	32	Type39

\* Please contact [RFS Technical Support](#) for more information on this product

**Special Beam Antenna****Wide Beam****806-869MHz | 1710-2170 MHz****2 Ports (1H 90°)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXV18-209014-C-A20	1710-2170	90	16.5	0-10	2 x 7/16	1	1349 x 169 x 80	8.5	Type55
APXV18-209015-C-A20	1710-2170	90	17.9	0-10	2 x 7/16	1	1850 x 169 x 80	11.5	Type55

## Special Beam Antenna Multi band Hybrid Beam

698–960 MHz | 1695–2690 MHz

### 10 Ports (1L+4H DB)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVB34L26AB_43-C-I20	698-960	65	17.1	2-12	10x 4.3-10	5	2690 x 396 x 190	39.5	Type40
APXVB34L26AB_43-C-I20S	1710-2690	33	19.7						

### 10 Ports (1L2H + 2H DB)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVBLL3LL26AB_43-C-I20	698-960	65	16.8	2-12					
APXVBLL3LL26AB_43-C-I20S	1710-2690	65	18.0	2-12	10x 4.3-10	5	2690 x 396 x 190	39.5	Type41
	1710-2690	33	19.2	2-12					

### 12 Ports (2L + 4H DB)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVBB34L20AB_43-C-I20	698-960	65	14.8	2-12	12x 4.3-10	6	2090 x 498 x 197	37	Type42
	1710-2690	33	18.7	2-12					

### Small Size Antenna

694-960 MHz | 1695-2690 MHz | 3300-4200 MHz | 5150-5925 MHz

#### 2 Ports (1H)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVL08B_43-C-I20	1710-2690	65	16.5	2-12	2x 4.3-10	1	800 x 160 x 115	5.1	Type2
APXVL08B_43-H									

#### 4 Ports (1L1H)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXBL06B_43-CT5	698-960 1710-2690	65	12.2 15.3	Fixed 5	4 x 4.3-10	0	620 x 350 x 200	8	Type44

#### 4 Ports (2H)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVLL09B_43-C-I20	1710-2690	65	16.1	2-12	4 x 4.3-10	2	850 x 320 x 123	10	Type3
APXVLL06-C-A20	1695-2690	65	15	5-18	4 x 7/16	1	609 x 288 x 118	6	Type3

#### 4 Ports (2H 33°)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXV3LL08B_43-C-I20	1710-2690	33	16.2	2-11	4 x 4.3-10	2	750 x 320 x 123	8.3	Type53

**SMALL SIZE ANTENNA CONTINUED**
**6 Ports (3H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXVLLL08B_43-C APXVLLL08B_43-C-A20	1710-2690	65	13.2	2-14	6 x 4.3-10	0 3	745 x 320 x 123	8.1	Type4

**6 Ports (1L2H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
AOXVBLL06_43-A-A20	698-960 1695-2690	360	6.4 9.7	Fixed 0 5-18	6 x 4.3-10	1	564 x 380 x 380	11.8	Type61
APXVBLL06-C-A20 APXVBLL06-C	698-960 1695-2690	65	10.6 14.8	5 5-18	6 x 7/16	2 0	609 x 340 x 200	8.1	Type12
APXVBLL09B_43-C-I20	698-960 1710-2690	65	13.1 16.4	2-15 2-12	6 x 4.3-10	3	980 x 350 x 200	16.2	Type12

**10 Ports (5H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
SO-LLYYZ06-F0	1695-2690 3300-4200 5150-5925	360	10.5 7.5 5.6	Fixed 5 Fixed 5 Fixed 0	10 x 4.3-10	0	609 x 332 x 332	10.8	Type67
SP-LLYYZ06-F0	1695-2690 3300-4200 5150-5925	65	14.9 11.7 5.6	Fixed 5 Fixed 5 Fixed 0	10 x 4.3-10	0	609 x 283 x 181	5.2	Type67

**12 Ports (2L4H)**

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
APXBBLYY05B_43-CT2	698-960 1710-2690 3300-3800	65	11.0 12.5 12.3	Fixed 2	12 x 4.3-10	0	590 x 499 x 199	9.8	Type45

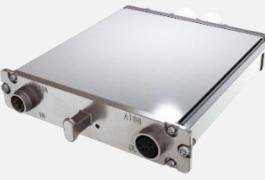
## SMALL SIZE ANTENNA CONTINUED

## 14 Ports (2L5H)

Model Name	Frequency (MHz)	HPBW (°)	Gain (dBi)	Electrical Downtilt (°)	RF Connector	RET	Dimensions (mm)	Weight (kg)	Array Type
O-BBLLYYZ06-01	694-960 1695-2690 3300-4200 5150-5925	360	3.8 10.1 7.2 5.9	Fixed 0	14 x 4.3-10	0	609 x 355 x 355	11.3	Type60
P-BBLLYYZ06-01	694-960 1695-2690 3300-4200 5150-5925	65	7.5 14.0 10.6 5.4	Fixed 0	14 x 4.3-10	0	609 x 340 x 200	7	Type60

## RET Models

### Single Primary

Model Family	Products
ACU-I20-H12A* ACU-I20-H12B* ACU-I20-H12C*	 
ACU-I20-B1* ACU-I20-B2* ACU-I20-B3* ACU-I20-B4* ACU-I20-B5* ACU-I20-B6* ACU-I20-B7* ACU-I20-B8*	 

### Dual Primary

Model Family	Products
ACU-X20* ACU-X20H*	 
ACU-X20-B*	

**RET Antenna configuration files : Download**

**RET Maintenance Guide : Download**

**Network Element Manager NEM-ALD-W User's Manual : Download**

NEM-ALD-W is designed to discover any device connected to an Antenna Line Device (ALD) network. It is compliant with the 3GPP and AISG 2.0 protocols

\* Please contact [RFS Technical Support](#) for more information on this product

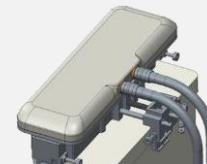
**RET Accessories****AISG Cables**

Model Family	Products		
AISG Cables			

**Portable Controller**

Model Family	Products
PCU-A-01*	
PCU-A-02*	

**Antenna Monitoring Unit**

Model Family	Products
AMU-E-01*	

\* Please contact **RFS Technical Support** for more information on this product

## Mounting Kits

### APM Series

Model Family	Products
APM40	APM40-2 APM40-5E
APM50-B	APM50-B1 APM50-H1
APM50-H	APM50-H2 APM50-H3 APM50-HS



## About RFS

Radio Frequency Systems (RFS) delivers the end-to-end RF solutions and expert services needed to evolve wireless and broadcast networks today and tomorrow. Our cables, connectors, antenna systems and RF conditioning products are based on more than 120 years of experience delivering cutting-edge RF solutions and industry firsts. As a result, our solutions are recognized globally for their innovation, superior performance and unmatched quality.

As an ISO-compliant company with global operations, we bring our customers world-class engineering and manufacturing skills backed with comprehensive local support services. Our customers know they can rely on our expertise and commitment to excellence from initial design to final delivery and beyond — whether they're looking to support 5G, deploy small cells, empower smart cities or improve indoor coverage in the most challenging locations.

### Australia

Kilsyth  
+61 3 9751 8400  
*Technical Support*  
Technical.Support@rfsworld.com

### United Kingdom

Haddenham  
+44 1844 294900  
*Technical Support*  
Product.Support@rfsworld.com

### China

Shanghai  
+86 21 3773 8888  
*Technical Support*  
Technical.Support@rfsworld.com

### France, Italy, Spain

Paris, Vimercate, Madrid  
*Technical Support*  
Product.Support@rfsworld.com

### Germany

Hannover  
+49 511 676 55 - 0  
*Technical Support*  
Product.Support@rfsworld.com

### Russia

Moscow  
*Technical Support*  
Product.Support@rfsworld.com

### North America

Meriden, CT  
+1.800.321.4700  
*Technical Support*  
ApplicationsEngineering@rfsworld.com

### UAE

Dubai  
+971 4 568 7979  
*Technical Support*  
Product.Support@rfsworld.com

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# RADIO FREQUENCY SYSTEMS