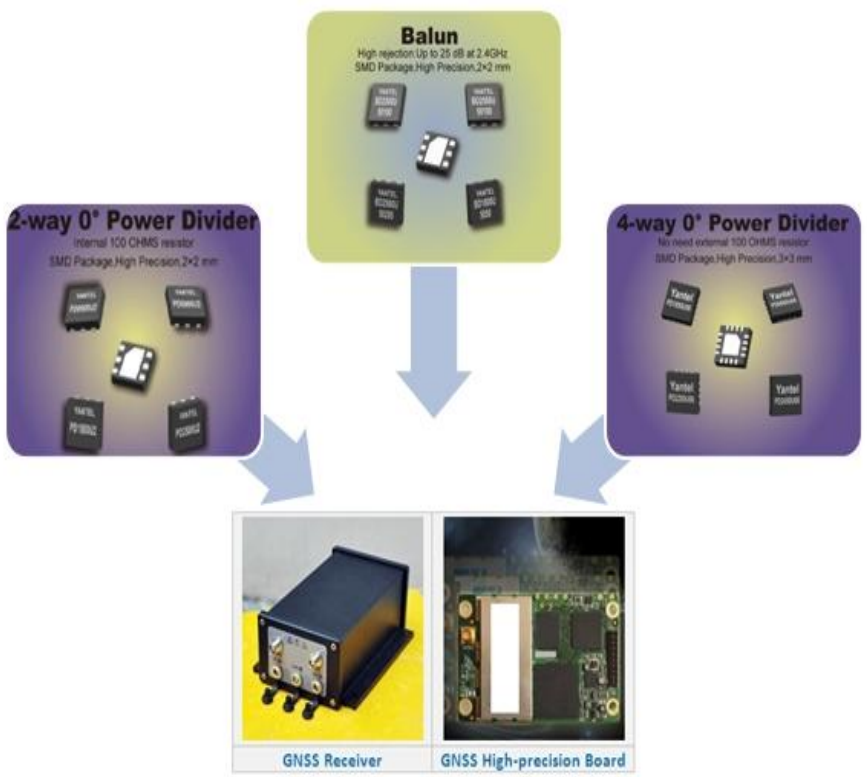
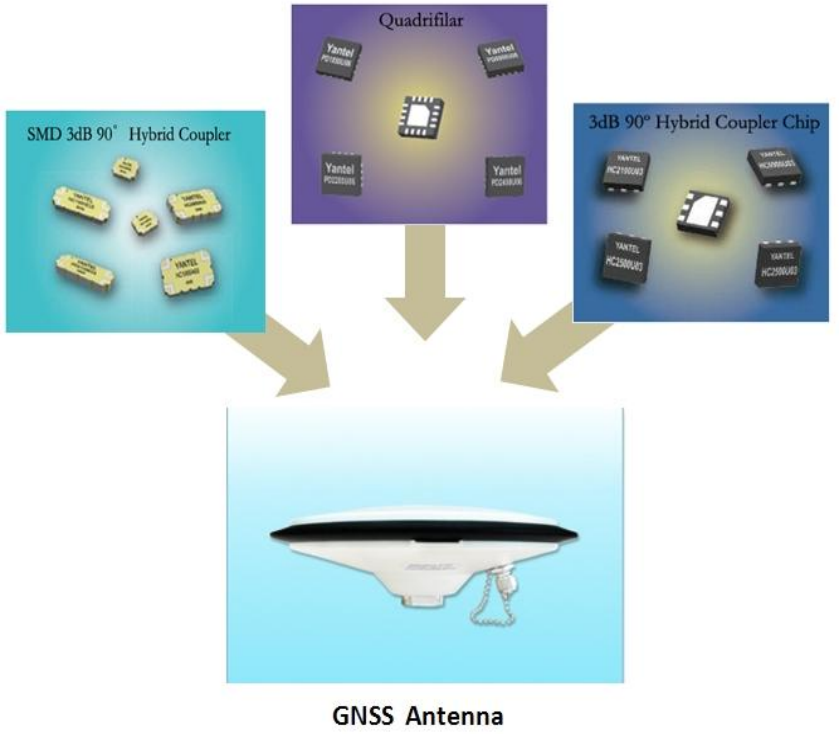
Yantel's 2-Way/4-Way Power Divider/Splitter IC and Quadrifilar IC applied to GNSS High-precision Board, GNSS receiver/ GNSS Antenna, etc.

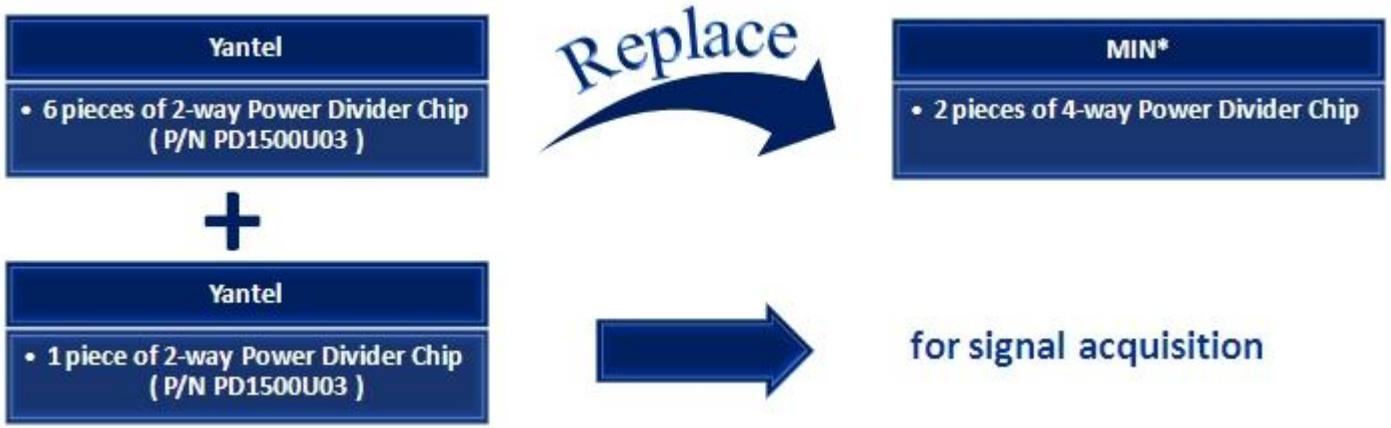
- Application Field：Steering System, Surveying, Positioning and Navigation





2-Way Power Divider/Splitter IC: http://www.yantel-corp.com/en/products/products1_183.html	**SMD 3dB 90 °Hybrid Coupler:** http://www.yantel-corp.com/en/products/products1_164.html
4-Way Power Divider /Splitter IC: http://www.yantel-corp.com/en/products/products1_184.html	**SMD 3dB90 °Hybrid Coupler IC :**http://www.yantel-corp.com/en/products/products1_180.html

1. GNSS High-precision Board Power Divider Application Solution:



Yantel Product Advantage:

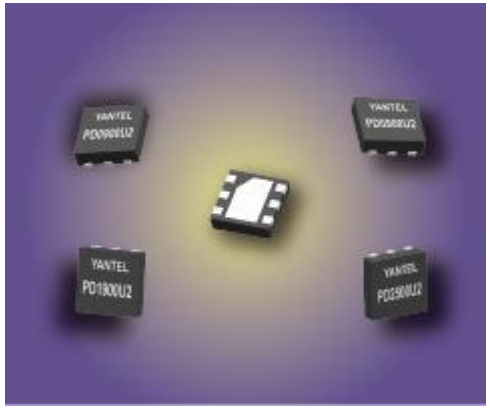
Cost Advantages:

- **The cost is lower 40% than other manufacturers'.**

Performance Advantage:

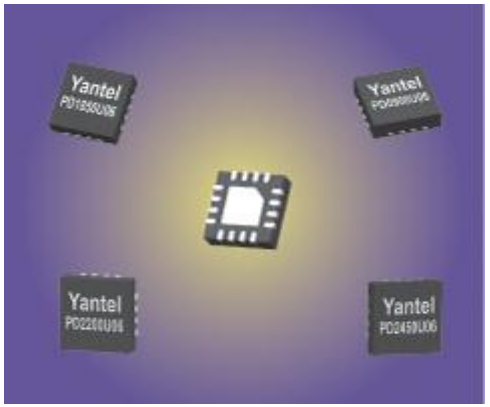
- **Low Loss & Low VSWR; Excellent amplitude & phase balance; High Isolation; Excellent repeatability**
- **No need external 100Ω Resistor (for 2-way 0 ºPower Divider/Combiner IC)**

2. Yantel's 2-way 0 ºPower Divider/Combiner IC



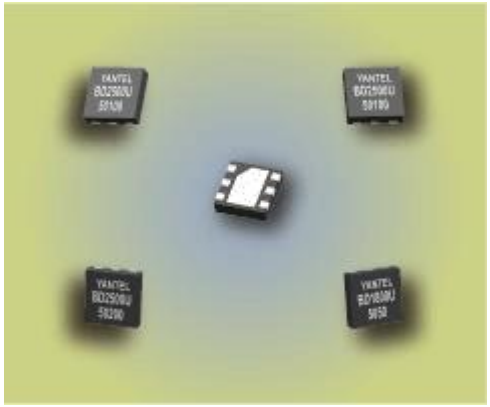
Part No.	Freq.Range (MHz)	Power (W) as a divider	Power (W) as a combiner	Package Size LXW (mm)	Insertion loss (dB)	Amplitude Balance (dB)	Phase Balance (deg)	Isolation (dB)	Input VSWR (:1)	Output VSWR (:1)
PD0500U03-210	280~610	2	1	2X2	0.60	0.1	0.5	12-20	1.40	1.20
PD0900U03-070	800~1000	2	1	2X2	0.40	0.1	0.5	20	1.20	1.12
PD1500U03-140	1350~1650	2	1	2X2	0.35	0.1	0.5	20	1.20	1.20
PD1500U03W	1000~2000	2	1	2X2	0.70	0.1	0.5	10	1.50	1.45
PD1700U03W	600~2900	2	1	3X3	0.70	0.1	0.5	11-27	1.2-1.6	1.1-1.6
PD1850U03-080	1650~2050	2	1	2X2	0.40	0.1	0.5	20	1.20	1.17
PD2150U03-090	1900~2350	2	1	2X2	0.40	0.1	0.5	20	1.20	1.17
PD2450U03-100	2200~2650	2	1	2X2	0.40	0.1	0.5	20	1.20	1.18
PD3550U03-110	3300~3800	2	1	2X2	0.40	0.1	0.5	20	1.20	1.20

3. Yantel's 4-way 0 ºPower Divider/Combiner IC



Part No.	Freq.Range (MHz)	Power (W) as a divider	Power (W) as a combiner	Package Size LXW (mm)	Insertion loss (dB)	Amplitude Balance (dB)	Phase Balance (deg)	Isolation (dB)	Input VSWR (:1)	Output VSWR (:1)
PD0900U06-150	820~960	2	0.5	3X3	0.80	±0.20	±1.5	22	1.30	1.20
PD1400U06-524	1200~1650	2	0.5	3X3	0.8~1.1	±0.50	±2.0	14~32	1.6	1.4
PD1850U06-160	1700~2000	2	0.5	3X3	0.80	±0.35	±1.5	21	1.35	1.25
PD2200U06-170	1700~2700	2	0.5	3X3	0.6~1.1	±0.35	±2.0	12~35	1.80	1.60
PD2450U06-180	2300~2700	2	0.5	3X3	0.70	±0.40	±2.0	18	1.35	1.25

4. Balun

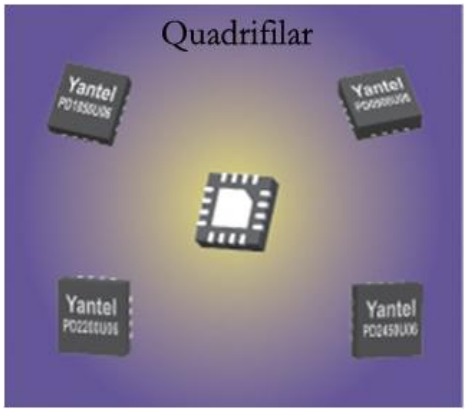


Part No.	Freq.Range (MHz)	Power (W)	Size LXW (mm)	Unbalanced Port Impedance (Ω)	Balanced Port Impedance (Ω)	Insertion loss (dB)	Amplitude Balance (dB)	Phase Balance (deg)	Return Loss (dB)	CMRR (dB)
BD0900U510-1301	800~1000	2	2X2	50	100	1.3	0.2	2	10	37
BD0900U520-1300	850~980	2	2X2	50	200	1.8	0.35	2	10	37
BD1200U510-1306	1100~1300	2	2X2	50	100	1.3	0.3	4	10	32
BD1200U520-1305	1100~1300	2	2X2	50	200	1.5	0.5	5	10	35
BD1600U510-1326	1500~1800	2	2X2	50	100	1.3	0.5	5	10	27
BD1600U520-1325	1400~1600	2	2X2	50	200	1.1	0.4	4	10	30
BD1800U510-1336	1700~1900	2	2X2	50	100	1.2	0.3	5	10	27
BD1800U520-1335	1600~1900	2	2X2	50	200	1.4	0.3	6	10	28
BD2100U510-1351	1900~2300	2	2X2	50	100	1.1	0.6	5	10	30
BD2100U520-1350	1900~2100	2	2X2	50	200	1.3	0.6	3	10	31
BD2400U510-1366	2100~2500	2	2X2	50	100	1.3	0.7	4	10	30
BD2400U520-1365	2300~2500	2	2X2	50	200	1.3	0.8	4	10	28

5. Quadrifilar IC

Features:

- Ultra small size:5.0 x 5.0 mm
- Excellent amplitude & phase balance
- Excellent repeatability
- High isolation
- Built with leading edge RFIC design technology
- Have one Input port and four Output ports that have 0 º, 90 º, 180 º, 270 ºof phase difference.



Part No.	Freq.Range (MHz) f_L- f_U	Power (W)	Size L×W (mm)	Return Loss (dB)	Insertion Loss (dB)	Amplitude Balance (dB)	Phase Balance (degrees)	Isolation (dB)
QF0900Q06	865~930	5~10	5×5	18	0.75	±0.6	90±3.0	17
QF1200Q06	1100~1300	5~10	5×5	17	0.65	±0.6	90±3.0	18
QF1600Q06	1520~1660	5~10	5×5	18	0.5	±0.5	90±4.0	20
QF2100Q06	1980~2200	5~10	5×5	16	0.6	±0.6	90±8.0	16
QF2500Q06	2400~2600	5~10	5×5	15	0.5	±0.5	90±8.0	15

6. SMD 3Db 90° Hybrid Coupler

Part No.	Freq.Range (GHz) f_L- f_U	Power (W)	Size L×W (mm)	Return Loss (dB)	Insertion Loss (dB)	Amplitude Balance (dB)	Phase Balance (degrees)	Isolation (dB)
HC1400P03	1.2 ~ 1.7	30	6.35×5.08	20.8	0.30	±0.35	90±4.0	20
HC1400P03-L	1.1 ~ 1.6	30	6.35×5.08	20.8	0.30	±0.35	90±2.0	20
HC1400P03S	1.15 ~ 1.63	30	6.35×5.08	20.8	0.30	±0.35	90±3.0	22
HC1600P03	1.558 ~ 1.616	30	6.35×5.08	23	0.19	±0.20	90±3.0	32
HC2500P03	2.3 ~ 2.7	60	6.35×5.08	20.8	0.30	±0.25	90±3.0	20

If you are interested, we can provide you with samples for your evaluation.