



佳邦科技 TECHNOLOGY CO., LTD.

RF SOLUTIONS

CONNECTING to THE WORLD

www.inpaq.com.tw

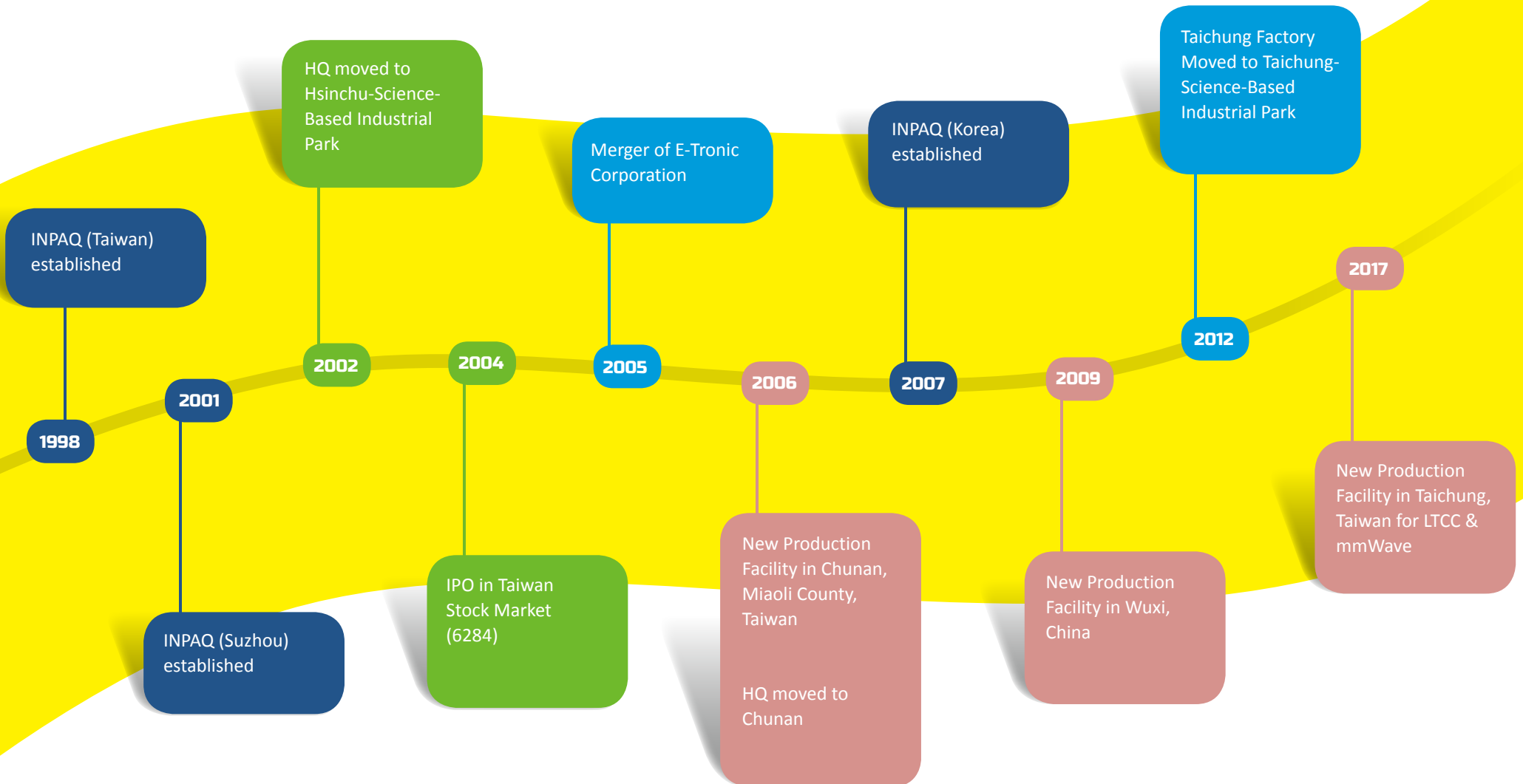
www.inpaqgp.com



Contents

01	Milestones		
02	INPAQ Facts		
03	Main Topics of INPAQ		
04	Frequency Allocation		
05	Cable Assembly		
		Application Design	06
		06 Smart Home	10 Smart Healthcare
		07 Smart Phone	12 Smart Vehicle
		08 Smart Wearable	15 Base Station
		09 Portable PC	
		Product	16
		16 Patch Antenna	25 LCT/LDS
		20 Active Antenna	25 NFC
		21 Chip Antenna	26 Automotive
		23 RFID	27 Customized Antenna
		24 Dipole Antenna	28 Wireless Power Charger

Milestones





INPAQ Facts



佳邦科技



20y

Established in 1998



125

2017 Sales Revenue
Million USD



2350

Global Employees

Market Leader

Top1 global market share of GPS antenna and automotive navigation.



Quick Response

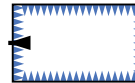
with service package

1. Technical team support
2. Applications analysis
3. Selection of specific antenna designs
4. Simulation to meet target performance
5. Evaluation for performance vs cost analysis



4

Factories



10

Anechoic Chambers



100

Intellectual Properties



100

Brand Customers

5 days



Multiple Antenna Technologies

to global tier 1 customers: patent design approved value for GNSS, Cloud-LTE, Networking, NFC/RFID



Quality Guarantee

Quality	✓ QC 080000	✓ IATF 16949:2016	✓ ISO 9001:2015
Automotive		✓ IATF 16949:2016	
Environment	✓ QC 080000	✓ OHSAS 18001:2007	✓ ISO 14001:2015
Social Responsibility		✓ OHSAS 18001:2007	



Global Support

24H responsiveness/
worldwide distribution



Main Topics of INPAQ



Smart Home

- Smart Speaker
- Smart Plug
- Smart Meter
- Security, Doorbell
- Connected Home Device



Phone & Wearable

- Smart Phone/Watch
- Mobile Pay (NFC)
- Smart Shoes/Glasses
- Smart Textile
- Smart Accessories
- Wireless Power Charging



Consumer Electronics

- Gaming
- VR/AR/MR
- NB/PC/Tablet
- Rugged PC/Tablet



Smart Healthcare

- Wearable
- Baby Monitor
- Home Care/Diagnose
- Medical Monitor



Automotive

- Autonomous Car
- Car Entertainment
- Telematics Control Unit
- V2X/DSRC/ETC
- GNSS/cm-level GNSS
- ADAS
- Wireless Power Charging



Internet of Things

- LoRa
- NB-IoT
- LTE Cat M1
- Networked Devices
- AP Router
- NFC
- RFID Reader & Tags



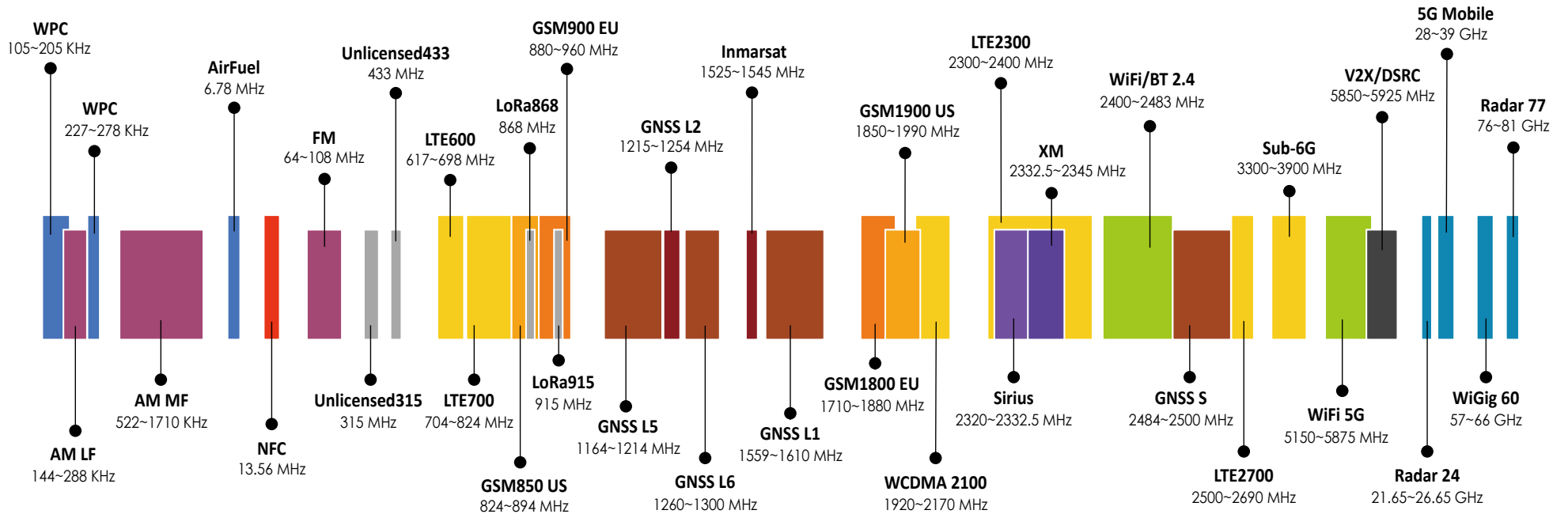
5G

- mmWave
- Sub-6G
- 10 Gbps for next Telecommunications
- Femtocell
- Smart Industry



Frequency Allocation

Application



Cable Assembly

Connector: HRS/I-PEX, SMA, SMB, MCX, MMCX, Fakra, GT5, GT16 assemblies in different genders and mounting styles.



HRS/I-PEX



SMA



SMB



MCX R/A



MMCX



Fakra Code C



Fakra Code D



GT5



GT16

Coaxial Cable: 0.81, 1.13, 1.32, 1.37, RG174, RG316, 1.5DS, CFD200 cable in any length



ø0.81



ø1.13



RG-174



RG-316

Please feel free to contact us for more connectors & cables.



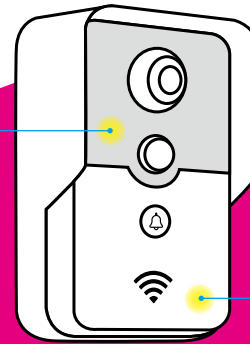
Application Design

Smart Home



3G/LTE
(for data exchange)

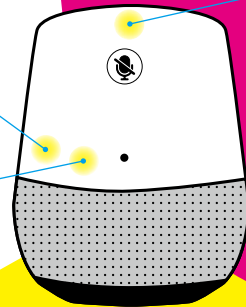
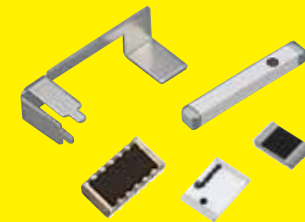
NFC
(for pairing or payment)



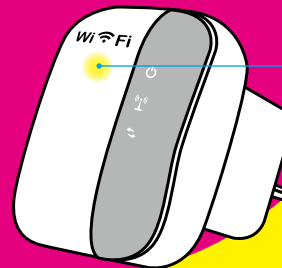
Doorbell



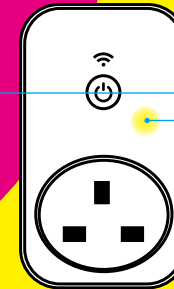
WiFi
(for data exchange)



Smart Speaker

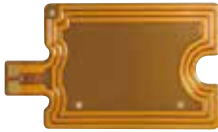


Smart Plug/WiFi Repeater

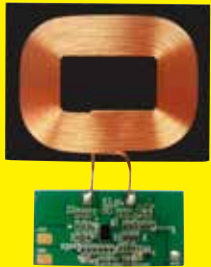


Smart Phone

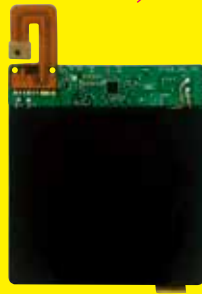
NFC
(for pairing or payment)



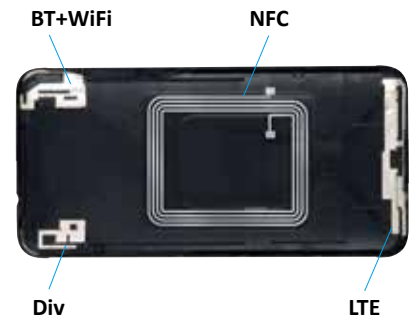
WPC
(power charging with better waterproof)



RX WPC



RX WPC+NFC



LCT
(laser circuit technology, antenna formed on ceramic or plastic housing)

Mobile

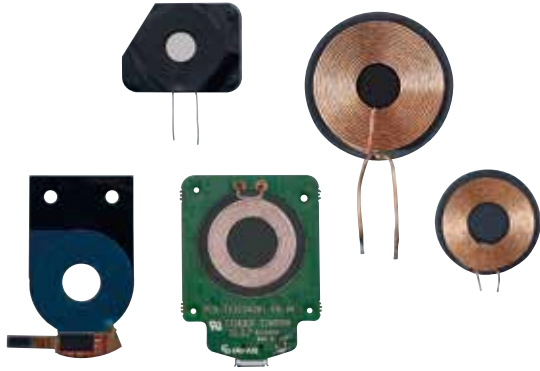


Smart Wearable



WPC

(power charging with better waterproof)



BT/WiFi chip

(for data exchange)



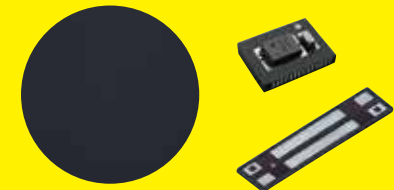
GPS patch

(for location information)



NFC chip/coil

(for pairing or payment)



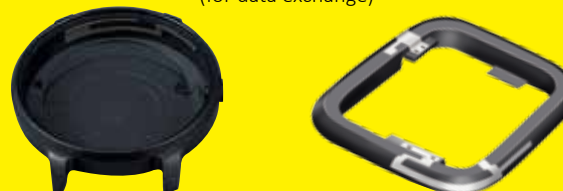
Watch

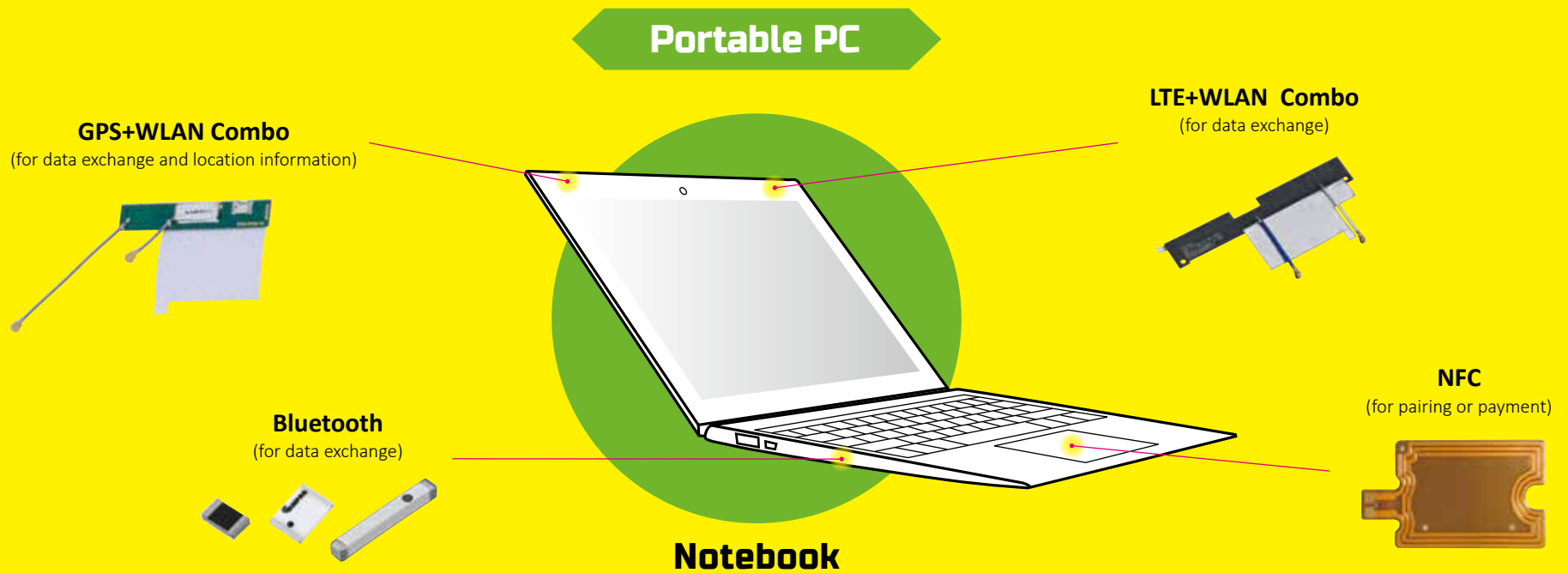
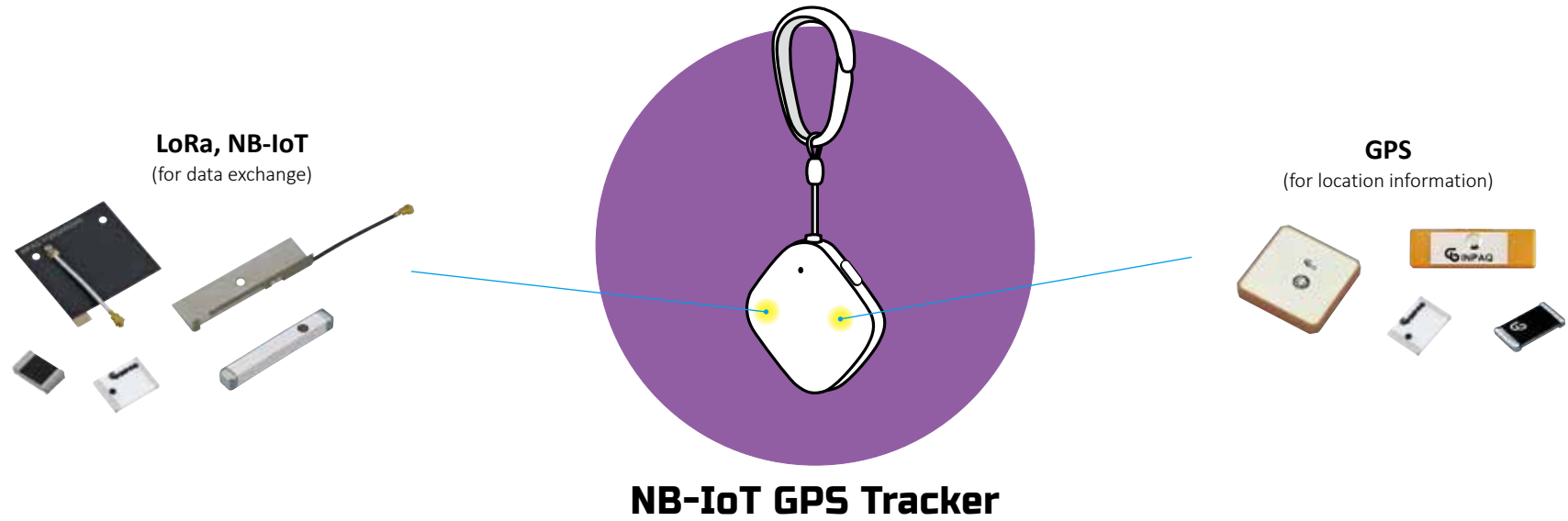
3G/LTE

(for data exchange)

LCT

(laser circuit technology, antenna formed on ceramic or plastic housing)



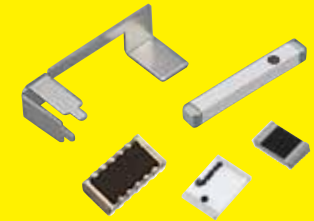




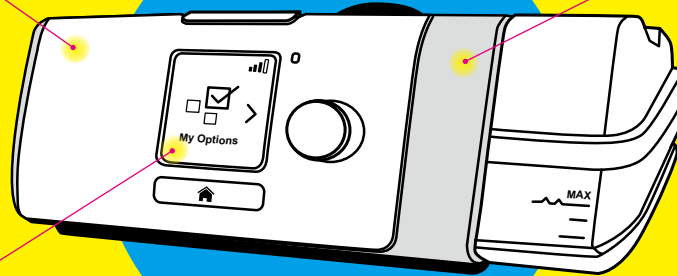
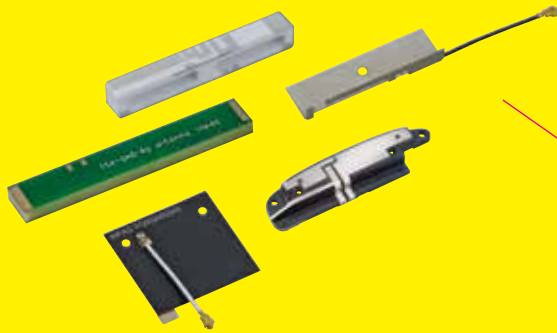
Smart Healthcare



Bluetooth/WiFi
(for data exchange)

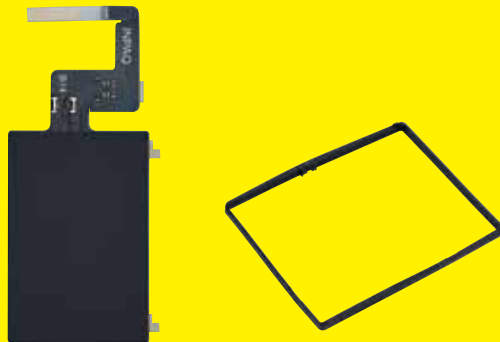


3G/LTE
(for data exchange)

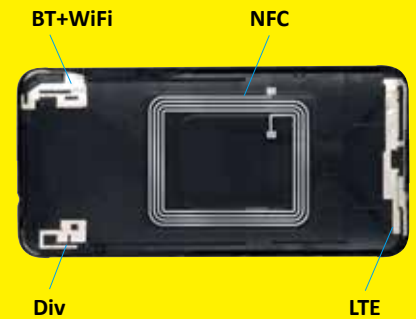


Pressure Therapy Device

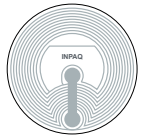
NFC as a reader
(for recall personal configuration and BT/WiFi pairing)



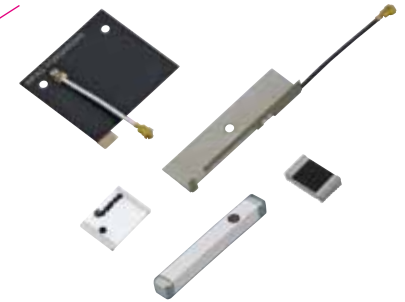
LCT
(laser circuit technology, antenna formed on ceramic or plastic housing)



NFC tag chip/coil
(for save personal configuration)



Bluetooth/WiFi
(for data exchange)



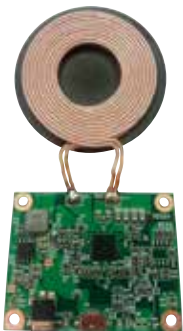
Mask

Remote Alarm

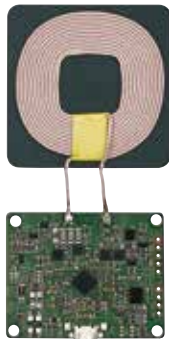
WPC
(power charging with better waterproof)

WPC
(on device)

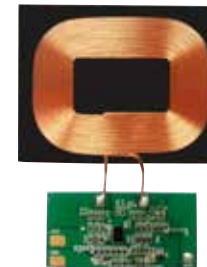
Power Station



TX 5W



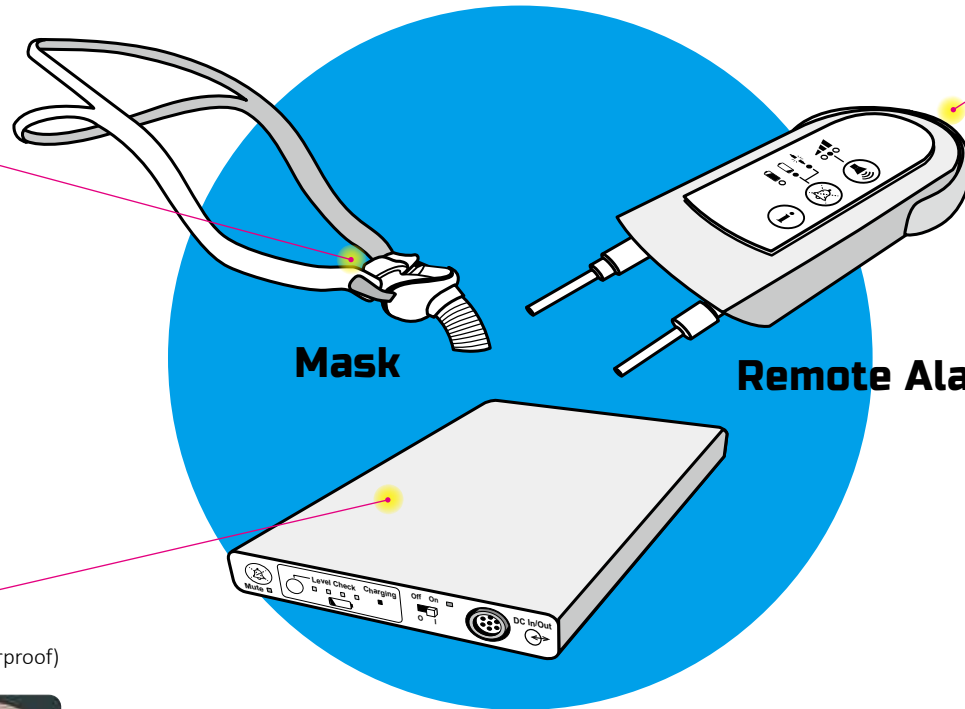
TX 15W



RX WPC



RX WPC+NFC

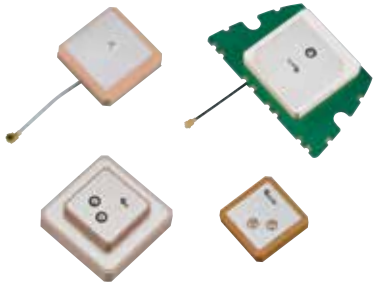




Smart Vehicle



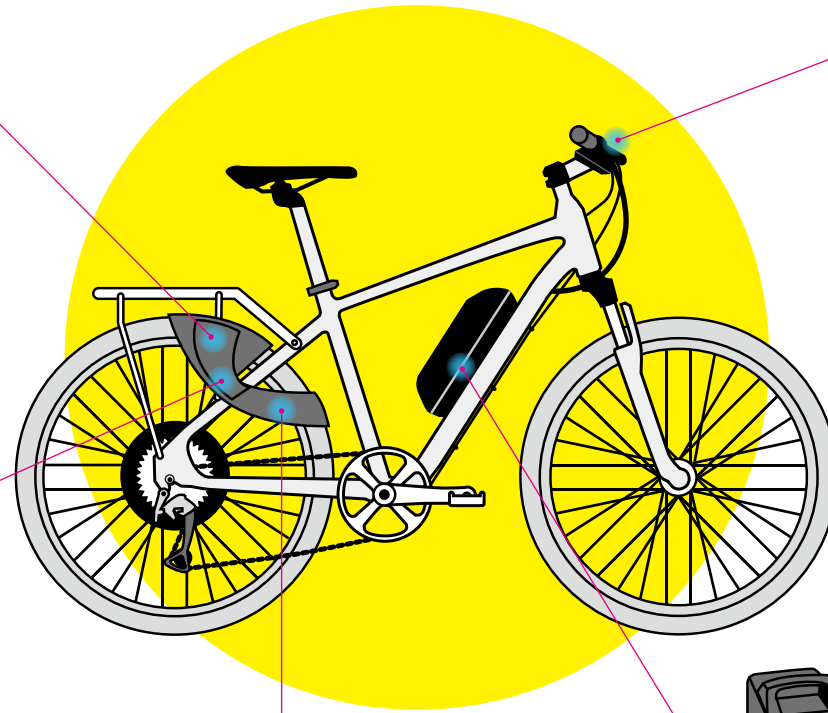
GPS patch & active
(for location information)



NFC reader
(for payment/identification)

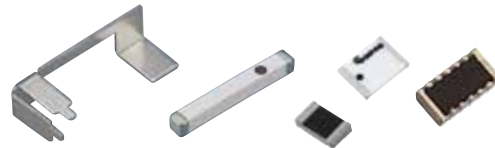


3G/LTE
(for data exchange)

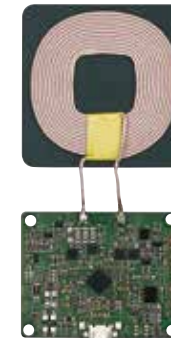
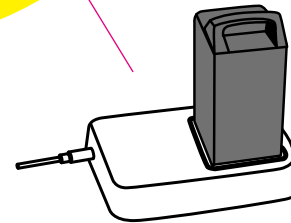


Bicycle

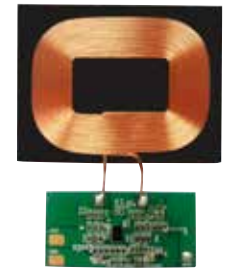
Bluetooth/WiFi
(for data exchange)



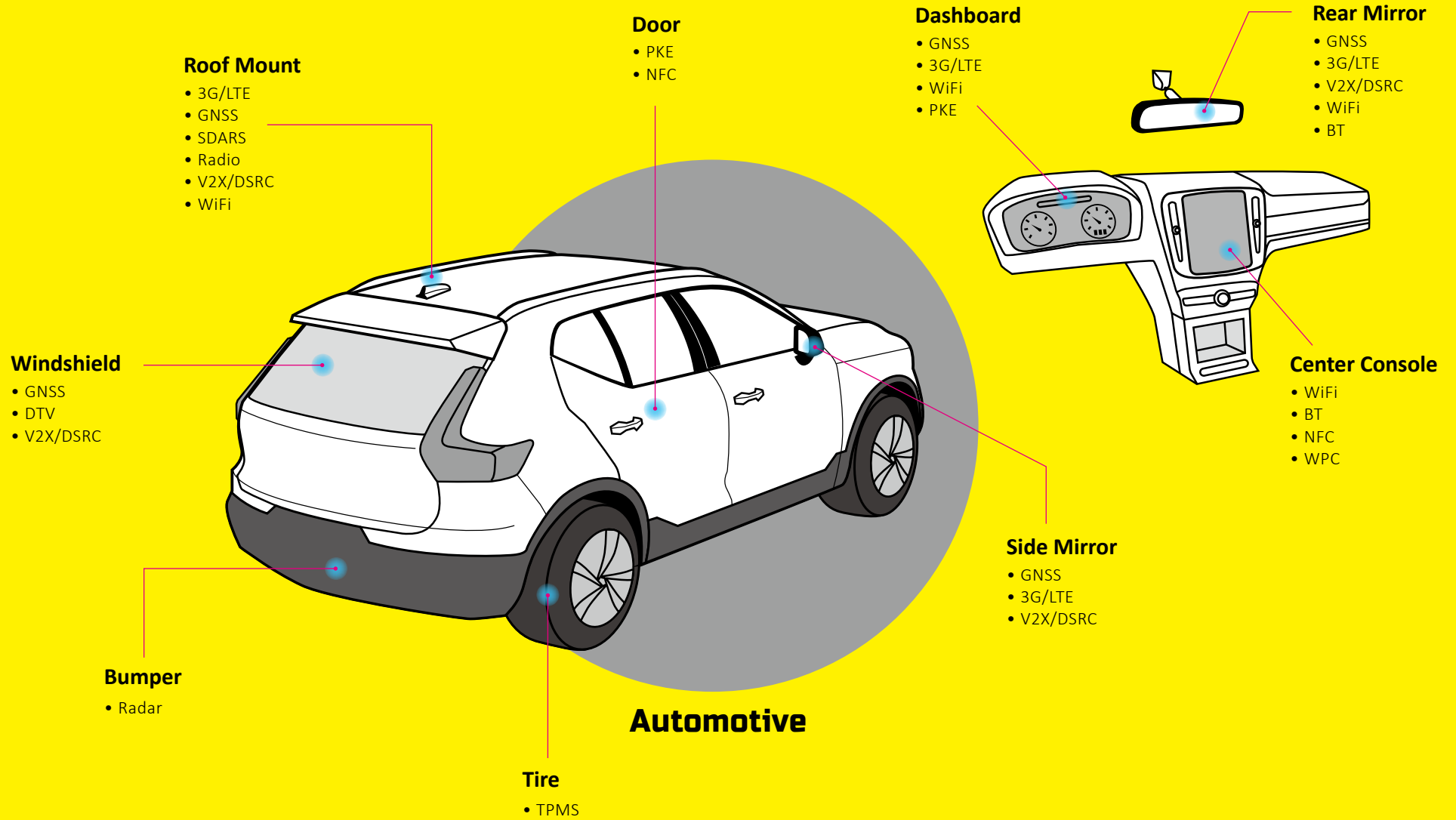
WPC
(power charging with better waterproof)



TX 15W

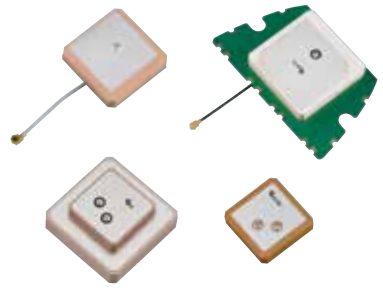


RX 15W

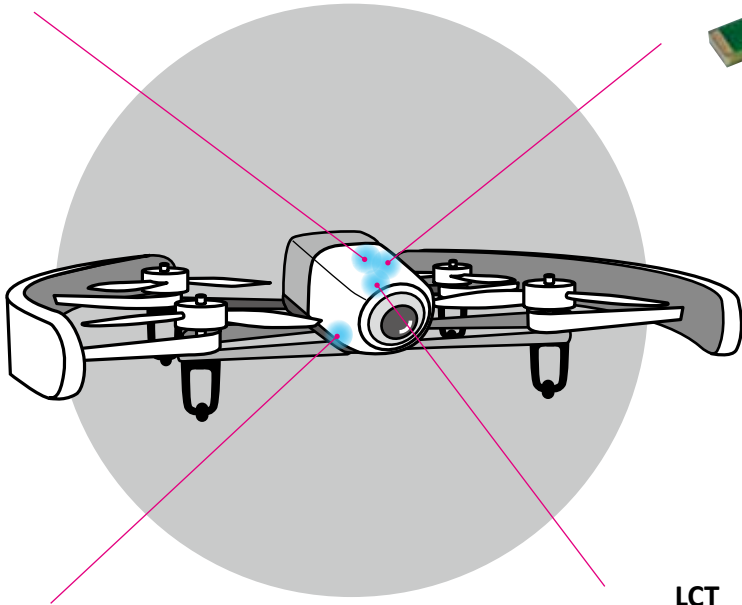


Smart Vehicle

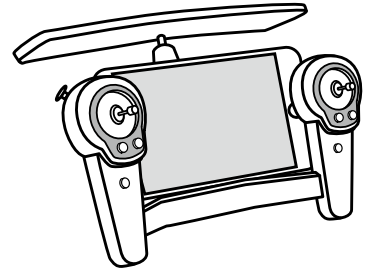
GPS patch & active
(for location information)



3G/LTE
(for data exchange)



Array antenna on controller
Ceramic/FPCB/PCB



Bluetooth/WiFi
(for data exchange)



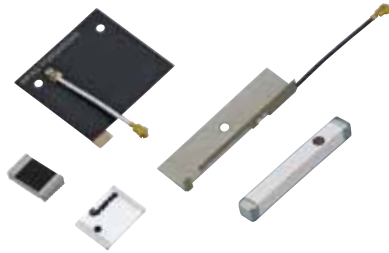
UAV

LCT
(laser circuit technology, antenna formed on ceramic or plastic housing)



Base Station

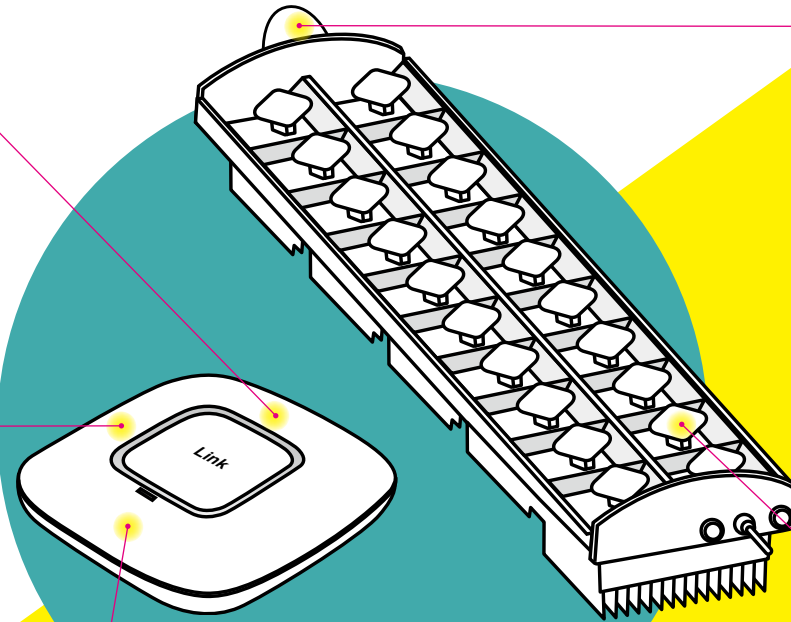
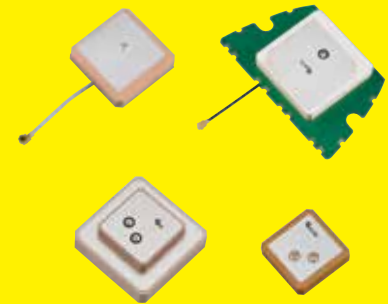
Bluetooth/WiFi
(for data exchange)



3G/LTE
(for data exchange)



GPS patch & active
(for timing synchronization)



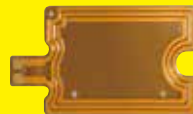
AP Router

Base station

Array element
(single/dual polarization)



NFC
(for pairing)





Product

PA1590MF6G-XXX-XX
36x36x6mm

PA1590MF4G-XXX-XX
36x36x4mm

PAT1585MH6G-101-18M
32x32x6mm

PAQ1585MH4G-102-18
32x32x4mm

PA1590MI6G-XXX-XX
25x25x6mm

PA1590MI4G-XXX-XX
25x25x4mm

Patch Antenna

GNSS Circular Pol.



GNSS Circular Pol.



PA1590MI2G-144-2ZM
25x25x2mm

PA1590MJ6G-102-16M
18.4x18.4x6mm

PA1590MJ4G-XXX-XX
18.4x18.4x4mm

PA1590MJ2G-XXX-XX
18.4x18.4x2mm

PA1590MS4G-XXX-XX
18x18x4mm

PA1590MK4G-XXX-XX
15x15x4mm

PA1590MQ5G-XXX-XX
13x13x5mm

PA1590MR6G-XXX-XX
12x12x6mm

PA1590MR4G-XXX-XX
12x12x4mm

PA1575MQ4S-123-1Z
10x10x4mm

PA1575MQ4S-124-1Z
9x9x4mm

PA1575MQ4S-125-1Z
6x6x4mm

GNSS Circular Pol.



GNSS Circular Pol. (dual pin)



GNSS Linear Pol.



Curve Patch (GNSS)



PA1582MF6G-136-2ZM
36x36x6mm
(2pin) AR 3dB all band

PA1590MI6G-136-1ZM
25x25x6mm
(2pin) AR 3dB all band

LA1575MS4G-XXX-XXX
20.5x6.2x4mm

LA1575MK4G-XXX-XXX
20.2x6x3.8mm
16x6x4mm

GPS434N-N0-00-A
15x15x2mm



PADGPS-I4H10G-101-17
25x25x4+38x38x10mm

PADGPS-I4H4G-101-17
25x25x4+38x38x4mm

PATGPS-I6H10G-101-1ZM
25x25x6+38x38x10mm
(2pin) L1L2L5 or L1L2L6

PATGPS-I6H10G-102-1ZM
25x25x6+38x38x10mm
(4pin) L1L2L5 or L1L2L6

PAGS-I4F2P2G-XXX-XXX
25x25x4+36x36x4mm

PATGS-I5F4G-100-ZZM
25x25x5+25x25x4mm

Patch Antenna

GNSS L1/L2/L5/L6



GNSS+SDARS



SDARS



WiFi 2.4 GHz



PAS23XXMF4G-XXX-XXX
36x36x4.2mm

PAS2333MF4G-148-1ZS
28x28x4mm

PAS2333MF6G-120-18M
25x25x6mm

PAS23XXMH4G-XXX-XXX
22.4x22.4x4mm

PA2400MF4G-157-18M
25x25x4mm

PA5500MF4G-XXX-XX
13x13x4mm

PA5800MF4G-112-111
13x13x4mm

PA5800MF4G-116-11
13x13x4mm

PA5800MF6G-112-11
13x13x6mm

PAR868MJ6G-113-18M
36x36x6mm

PAR915MJ6G-112-18M
36x36x6mm

WiFi 5 GHz



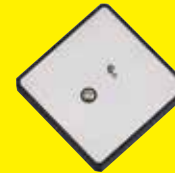
**ETC 5.8 GHz
(Broadside)**



**V2X/DSRC 5.8 GHz
(Omni)**



RFID 868 MHz

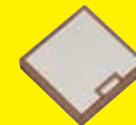
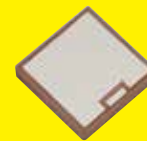
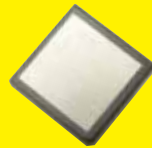


RFID 915 MHz



**Patch
Antenna
(SMD)**

GNSS Circular Pol.



PA1575MZ50I4G-XX-SMD
25x25x4mm

PA1575MZ50J4G-XX-SMD
18.4x18.4x4mm

PA1575MZ50J2G-XX-SMD
18.4x18.4x2mm

PA1590MS4G-100-SMD-S
18x18x4mm

PA1590MK4G-100-SMD
15x15x4mm

PA1575MQ3.5G-102-SMD-S
12x12x3.5mm



B3G02N-S5-00-A
36x36x9.75mm

GPSGLONASS03N-S3-03-A
25x25x8.25mm

GPSH237N-N3-37-A
18.4x18.4x6.65mm

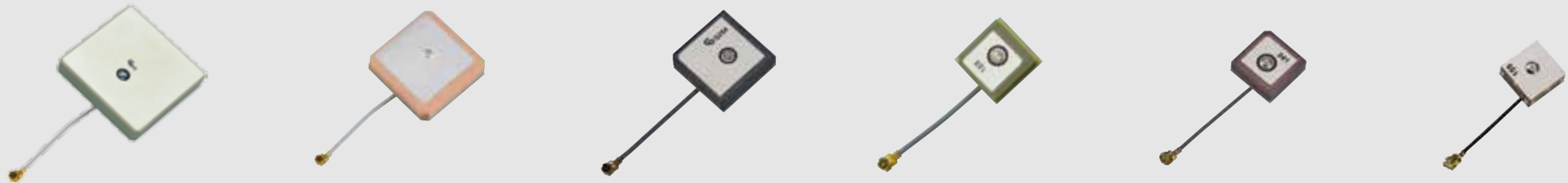
GPS391N-S3-00-A
13.4x13.4x5.6mm

GPSH212N-N3-13-A
12x12x6.35mm

GPSH312N-N3-04-A
10x10x6.55mm

**Active
Antenna**

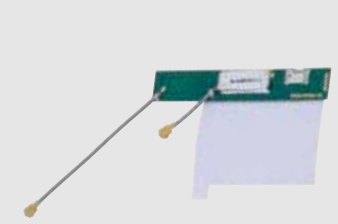
GNSS



GNSS



GNSS+2.4 GHz



GPSH245N-N3-07-A
9x9x6.55mm

GPSH198N-N3-39-A
20.2x6x6.55mm

GPSH208N-N3-37-A
16x6x6.55mm

GPS396N-S3-00-A
37.0x8.0x2.5mm

GPS401N-S3-00-A
30.0x8.0x2.5mm

GPSWLAN09N-S1-00-A
64.6x12.0x2.8mm

ACA-5036-A2-CC-S
5.2x3.7x0.7mm

ACA-3216-A1-CC-S
3.2x1.7x0.5mm

ACA-2012-A1-CC-S
2.0x1.2x0.55mm

ACA-8010-A1-MC-S
8.0x1.0x1.0mm

ACA-5020-A2-MC-S
5.0x2.0x0.72mm

ACA-3216-A2-MC-S
3.2x1.7x0.5mm

**Chip
Antenna**

2.4 GHz



5 GHz



2.4/5 GHz



ACL-5036-A0-CC-S
5.2x3.7x0.7 mm

ACL-4516-A1-MC-S
4.5x1.6x1.0 mm

ACM3-5036-A1-CC-S
5.2x3.7x0.7mm

ACM3-3216-A1-CC-S
3.2x1.7x0.5mm

ACM3-9823-A1-MC-S
9.8x2.3x1.0mm



ACLX-5036-A1-CC-S
5.2x3.7x0.7mm

ACM4-5036-A1-CC-S
5.2x3.7x0.7mm

ACD-5036-A3-CC-S
5.2x3.7x0.7 mm

ACD-3216-A1-CC-S
3.2x1.7x0.5mm

ACM0-3216-A1-CC-S
3.2x1.7x0.5mm

ACM5-3216-A1-CC-S
3.2x1.7x0.5mm

**Chip
Antenna**

GNSS L1/L2/L5/L6



GNSS



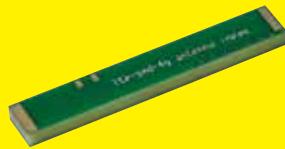
GNSS+2.4 GHz



GNSS+2.4/5 GHz



LTE



**433 MHz
(315)**



**915 MHz
(868, LoRa, NB-IoT)**



FM



WAG-H-LTE4-00-001
45x5x6mm

WAG-P-LTE8-00-003
50x8x3.2mm

ACF-2505-A1-MF-S
25x5x0.8mm

ACH-1604-A0-MF-S
16.0x4x0.8mm

ACH-5036-A1-CC-S
5.2x3.7x0.7mm

FMCN2F100G
25x5x0.8mm

VGAP-CLA-AS-A1
5.2x3.7x0.7mm

VGAP-CLC-AS-A1
5.2x3.7x0.7mm

VGAP-CLB-AS-A1
5.2x3.7x0.7mm

VGAP-CG0-AS-A1
5.2x3.7x0.7mm

VGAP-CG1-AS-A1
5.2x3.7x0.7mm

VGAP-CLK-AS-A1
5.2x3.7x0.7mm

**Chip
Antenna
(automotive)**

2.4 GHz



5 GHz



2.4/5 GHz



GNSS



**3~4 GHz
(KeyFob)**



RFID

Ear Tag



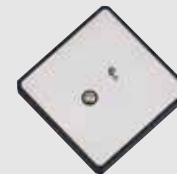
Customized

868/915 MHz



RFIDXXN

868 MHz



PAR868MJ6G-113-18M
36x36x6mm

915 MHz



PAR915MJ6G-112-18M
36x36x6mm



DAM-L8-B-N0-000-03-13
87mm (Gain: 2 dBi)

DAM-L12-B-N0-000-04-14
173mm (Gain: 5 dBi)

DAM-G0-B-M1-180-02-08
102mm (Gain: 2 dBi)

DAM-L8-H-N0-000-03-14
87mm (Gain: 2 dBi)

DAM-C2-H-N0-000-04-02
194mm (Gain: 5 dBi)

DAM-Q4-B-N0-000-04-14
362mm (Gain: 9 dBi)

Dipole
Antenna

2.4 GHz



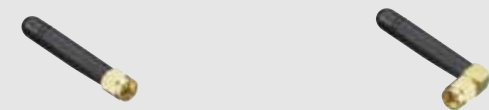
2.4/5 GHz



3G/LTE



Others
(433 MHz)



DAM-P8-K-N0-000-18-13
115.5mm (Gain: 2 dBi)
824~894, 1920~2170 MHz

DAM-L8-K-N0-000-03-13
87mm (Gain: 2 dBi)
824~960, 1710~2170 MHz

DAM-D4-R-N0-000-04-02
239mm (Gain: 4 dBi)
698~960, 1710~2700 MHz

DAM-P2-G-N0-000-22-03
51mm (Gain: 1 dBi)

DAM-P2-G-N0-000-18-03
51mm (Gain: 1 dBi)

NF-C-F6-R0-073
21.5x24.5x0.27mm

NF-C-F4-R0-005
50x40x0.25mm

NF-C-F10-R0-083
115x105x1.38mm

NF-C-F10-R0-02-001
51x36.8x0.26mm

ACN-9822-A4-S
9.8x2.2x0.4mm

ACN-5036-A1-PC060-S
5.0x3.6x1.3mm

NF-TAG-F6-R0-002
30x20x1mm

NF-TAG-F0-R0-009
Ø14.5x0.3mm

NF-X-XX-R0-XXX
110x125mm

NFC

Antenna



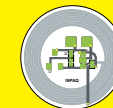
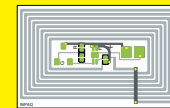
Antenna+cable



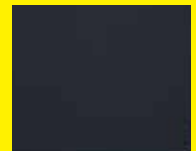
Chip



Tag



Ferrite



LCT/LDS

Ceramic



WiFi+BT

Mobile



LTE



LTE+WiFi+BT+GPS

IoT



WiFi MIMO

Automotive



AM/FM



GPSLX09U6W-S5-00-A
60x63x26mm
IP66

B3G02G-S3-XX-A
49.14x46.14x15.94
IP66

GPSGLONASS03D-S6-XX-A
37.4x34.0x12.95mm
IP66

GPSGLONASS13S3W-S6-00-A
72x59x21mm
IP66

GPS03B-D3-00-A
37.0x8.0x2.8mm
IP66

GPS08H-S3-0020-A
49.14x46.14x14.3mm
IP66

Automotive

L1/L2/L5/L6



GNSS



GNSS



GNSS+3G/LTE



GNSS+LTE+WiFi



GNSS+Radio



GPS10D-S3/S5-XX-A
37.5x34.5x12.5mm
IP66

GPS316K-S5-29-A
37.4x34.0x12.95mm
IP66

GPS01R-S3-23-A
120x39.8x11mm
IP66

GPS354P-S3-12-A
60x60x15mm
IP66

GNCLTEWiFi36U5W-S3-00-B
67x138x11mm
IP66

GNSAMFM-25S1W-S5-00-B
170.42x70x70.9mm
IP66

Metal+cable

FPCB+cable

PCB+cable

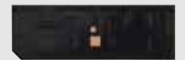
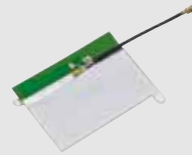
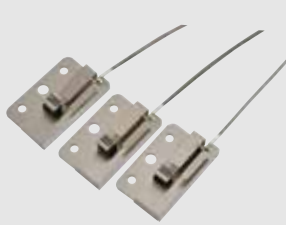
Metal

FPCB

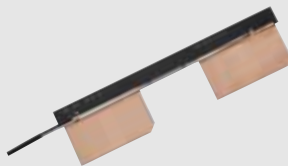
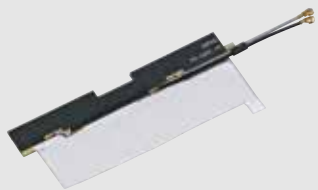
PCB

**Customized
Antenna**

WiFi/BT



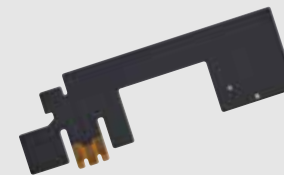
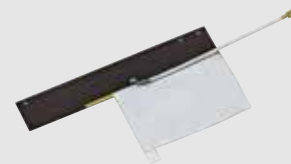
WiFi Combo



PCB+cable

PCB+cable

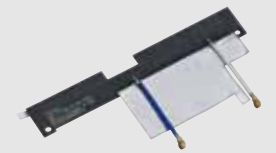
3G/LTE



PCB+cable

FPCB

3G/LTE+WiFi Combo



PCB+cable



WPC-W-P-TX-MPA2-001
53x53x5mm
Ferrite: Mn-Zn

WPC-W-P-TX-A11-003
Ø50x3.8mm
Ferrite: Mn-Zn

WPC-W-P-TX-A13-001
56.5x98.3x3.5mm
Ferrite: Ni-Zn

WPC-W-P-TX-CF-001
Ø27x0.76mm
Ferrite: Ni-Zn

WPC-W-P-TX-CF-003
Ø23x2.1mm
Ferrite: Ni-Zn

**Wireless
Power
Charger**

Coil Tx

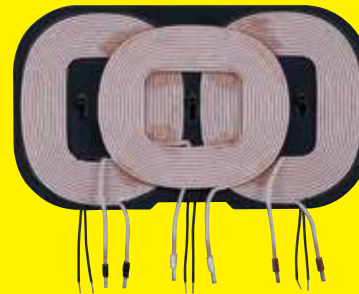
MPA2-15W



A11-5W



A13-5W



Wearable



Wearable



15W



**15W
(WPC+NFC)**



15W



5W



Wearable



**Wearable
(with magnet)**



Coil Rx

WPC-W-P-RX-CF-023
50x94.9x0.7mm (FPCB)
Coil Dim: 50x40x0.7mm
Ferrite: Ni-Zn

WPC-W-P-RX-FF-009
52x77.63x0.3mm
Ferrite: Nanocrystalline
(Mn-Zn also available)

WPC-W-P-RX-FF-XXX
60x78x0.25mm
Ferrite: Mn-Zn

WPC-W-P-RX-CF-029
30x30x0.71mm
Ferrite: Ni-Zn

WPC-W-P-RX-CF-004
16x10x0.8mm
Ferrite: Ni-Zn

WPC-W-P-RX-CF-017
18x24x0.85mm
Ferrite: Amorphous

WPC-W-A-TX-MPA2-002
40x50x3.7mm (PCBA)
Coil Dim: 53x53x5mm

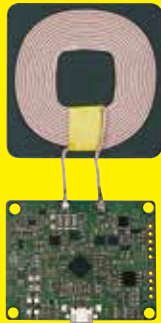
WPC-W-A-TX-MPA5-002
62x50x8.9mm (PCBA)
Coil Dim: Ø50x4.1mm

WPC-W-A-TX-A11-017
20x45x2.7mm (PCBA)
Coil Dim: Ø50x3.8mm

WPC-W-A-TX-A11-015
42.75x32x4.5mm (PCBA)
Coil Dim: Ø35x2.5mm

Module Tx

Qi Compliance-15W



Qi Compliance-5W (Support Samsung, Apple Quick Charge 10W)



Qi Compliance-5W



Wearable-2.5W

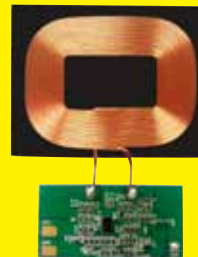


Module Rx

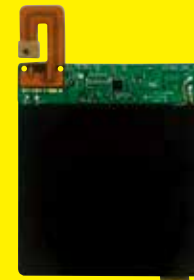
Qi Compliance-15W



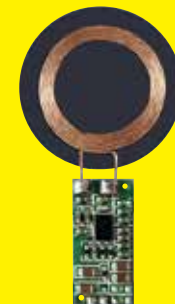
Qi Compliance-5W



Qi Compliance-5W (WPC+PMA+NFC)



Wearable-1.5W



WPC-W-A-RX-CF-009
30x30x2.35mm (PCBA)
Coil Dim: 40x50x0.25mm

WPC-W-A-RX-CF-001
15x30x1.2mm (PCBA)
Coil Dim: 33x43x0.8mm

WPC-D-A-RX-CF-001
11.65x52.2x1.16mm (PCBA)
Coil Dim: 48.65x52.5x1mm

WPC-W-A-RX-CF-010
15x7x1.1mm (PCBA)
Coil Dim: Ø19.5x0.9mm



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