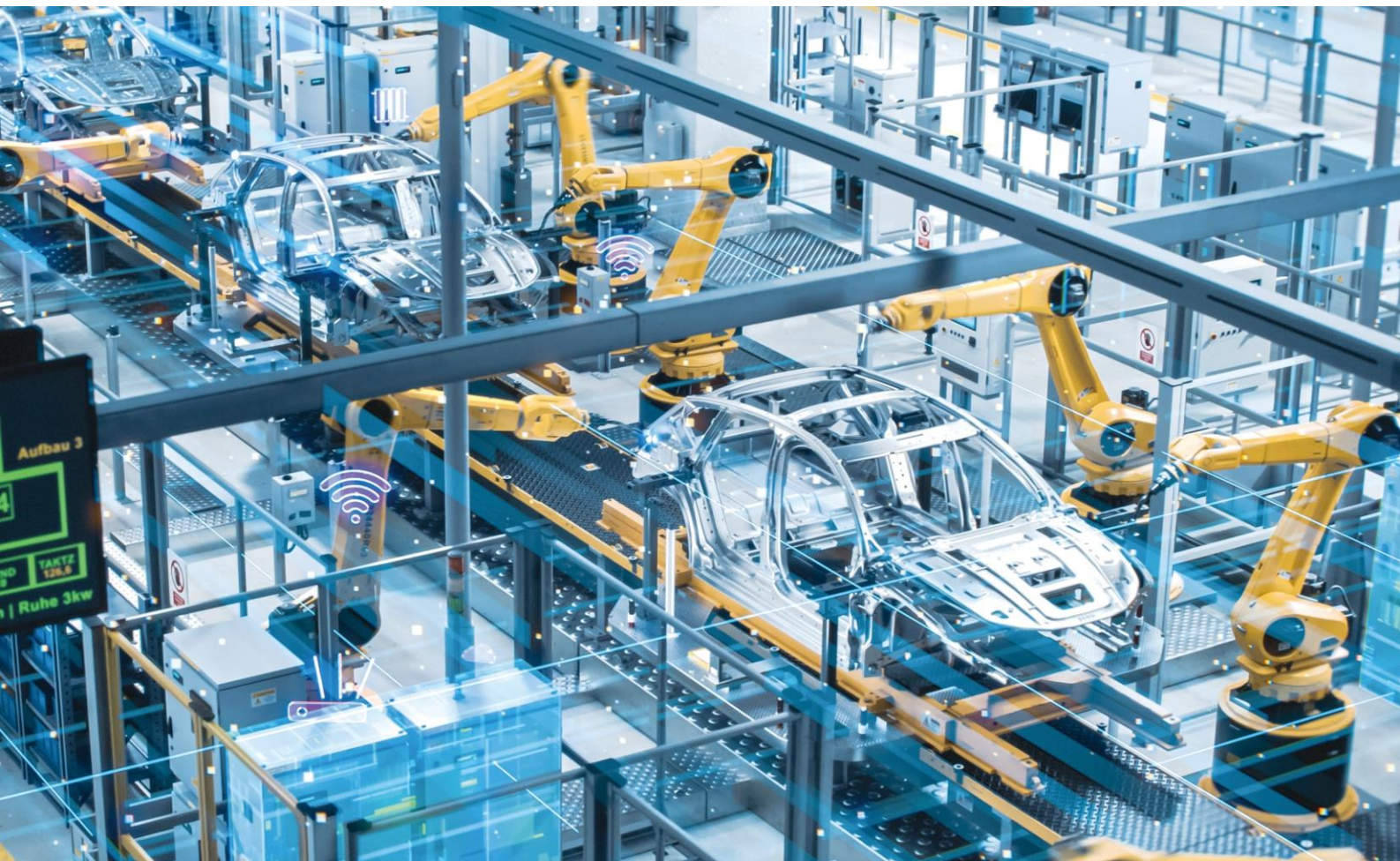


Wireless System

RS1000, 2000, 4000 Series



TPC Mechatronics Wireless System

Wired System

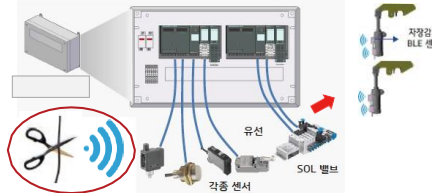


- High cost for wiring work
- Malfunction by cut wire
- Inflexible production line

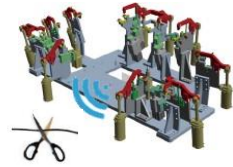
Achieving wireless

Achieving wireless system of PLC based FA system

→ Remove PLC in/output card box

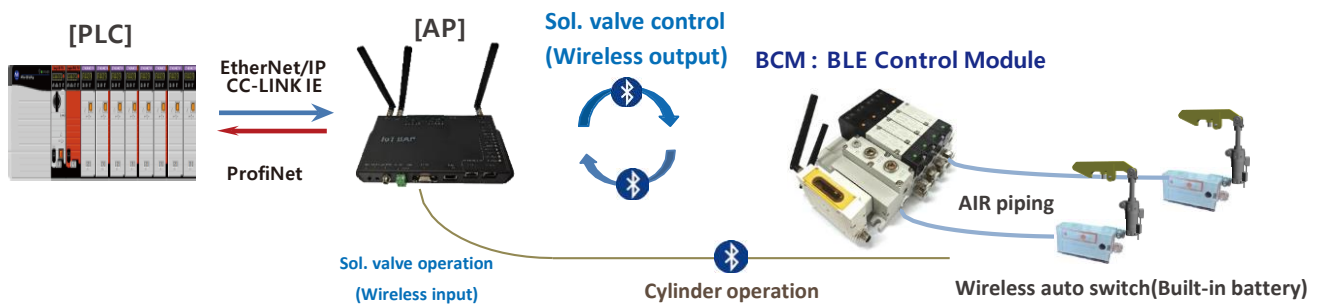


Wireless System

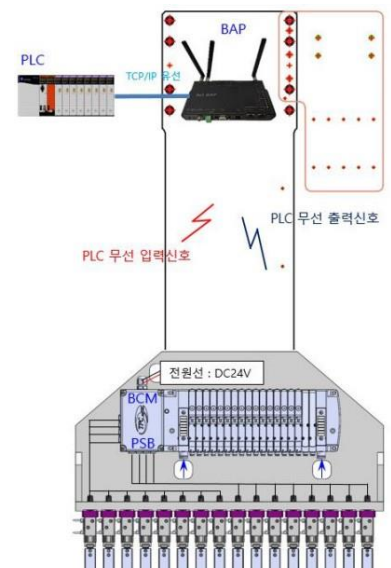
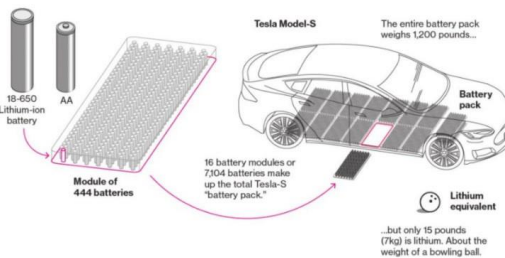
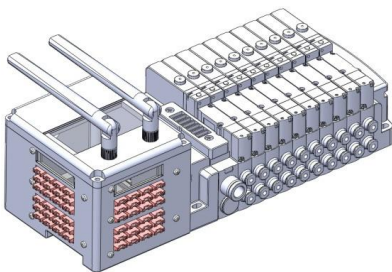


- Cut down wiring work cost
- No worries about malfunction by cut wire
- Flexibility in production line.

► Automobile Assembly Line Body Fixture Jig System Structure



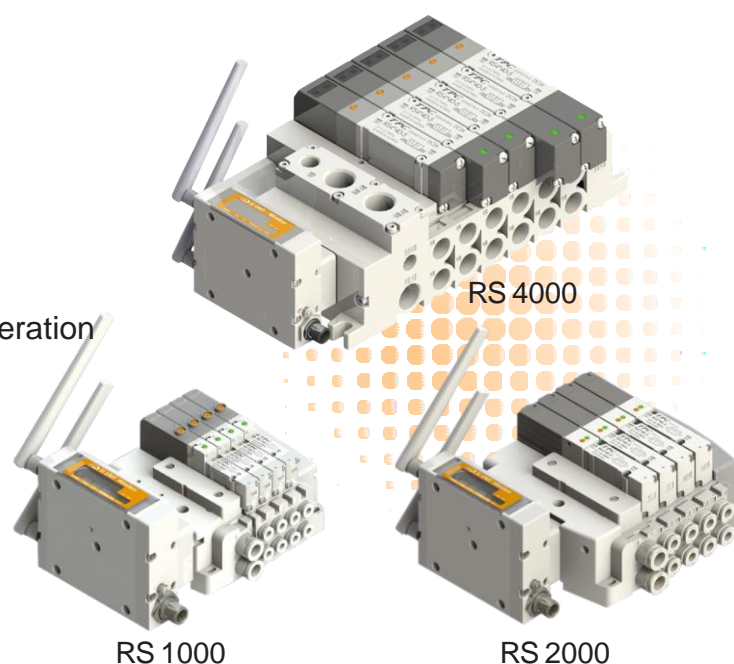
► Battery Cell Wireless Gripper (Input/Output Module Applied)



Wireless Solenoid Valve

● RS1000, 2000, 4000 Series

- Wireless module : Bluetooth 5.0
→ EtherNET/IP, CC-Link IE Field, ProfiNET
- Wired module : CC-Link Ver. 1.1
- Compact design
- 2 color LED allows to easily check valve operation
- Assembly with tie rods
- IP65 grade
- Single, Double, 3-Position Available
- Maximum output – 32 points



Specification

Item		RS1000, 2000, 4000 Series	
Fluid		Air	
Operating pressure range		0.2~0.7	
Ambient & Fluid temp.		-5 ~ 50°C (with no freezing)	
Pilot air exhausting type		Internal pilot, Collected exhaust	
Power voltage range	Communcation power	DC 11~25V	
	Solenoid valve	DC 24V ±10%	
Consuming currenxy	Communication & Internal	100mA or less	
	Valve	2A or less	
Number of output points		16, 32 (Only 32 is available for wireless type)	
IP grade		IP65	
Max. operating frequency		3 Hz	
Solenoid valve response time		30ms or less (Single, Double)	
Solenoid valve flow rate		32.4 mm2, (Cv : 1.8)	
Port size (A,B port)		RS1000	Ø3, Ø4, Ø6
		RS2000	Ø4, Ø6, Ø8
		RS4000	Rc(PT) 1/4, 3/8
Max. distance for communication		Wireless : 20m / Wired(CC-Link) : 1,200m	
Communication system		Wireless : Bluetooth 5.0 / CC-Link : Ver 1.1	
Short circuit protection		Available	
Connection		T branch, Multidrop	
Protocol		EtherNET/IP, CC-Link IE Field, ProfiNET	

How to order RS valve SI unit + Manifold

RSM 4 A - SU3 W - B N - 04

1
2
3
4
5
6

1 RS Series

- 1 : RS1000(10mm)
- 2 : RS2000(15mm)
- 4 : RS4000(24mm)

2 Network Type

- SU1 : Only output(16 points)
- SU2 : Only output(24 points)
- SU3 : Only output(32 points)
- SU4 : Input/Output common

3 Protocol

- C : CC-Link
- N : DeviceNET
- W : Wireless
- * W is only available with SU3

4 P, E Port

- B : "B" side (2~10 stations)
- T : "T" side (2~10 stations)
- A : Both side (2~24stations)
- * Only B is available for RS4000

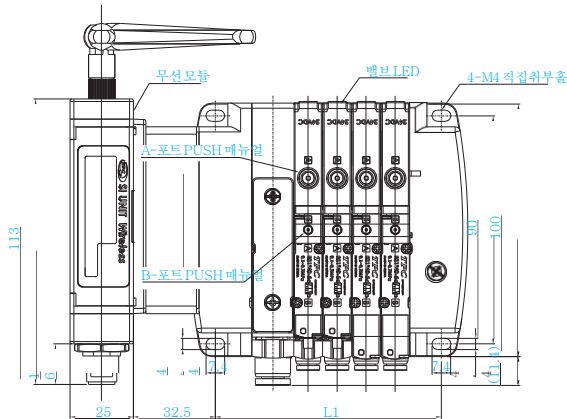
6 Pilot type

- Blank : Internal pilot
- N : Internal pilot w/ silencer
- P : External pilot
- PN : External pilot w/ silencer
- * Only internal pilot is available for RS4000

5 P, E Port size

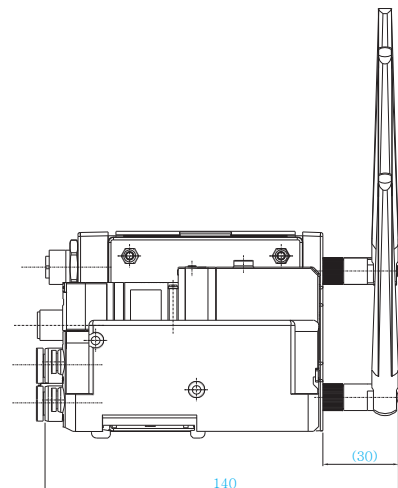
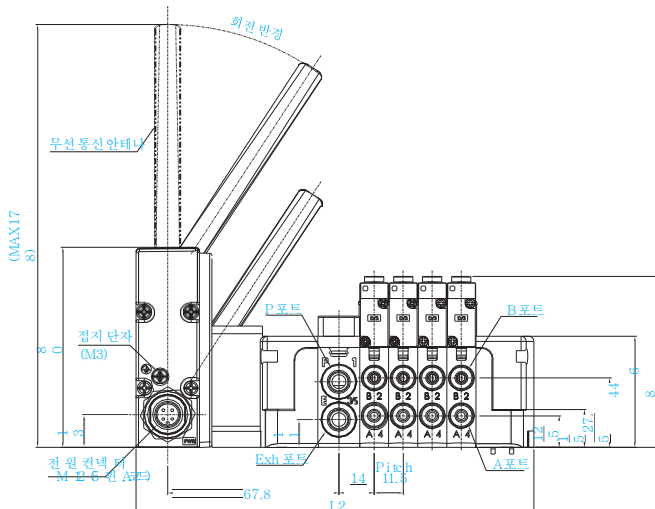
Symbol	mm	Symbol	Inch	Series
T8	Ø8	U8	Ø5/16"	RS1000
T10	Ø10	U10	Ø3/8"	RS2000
04	P, R : Rc(PT) 1/2 PE, X : Rc(PT) 1/4	04U	P, R : NPT 1/2 PE, X : NPT 1/4	RS4000

RS1000 Dimensions

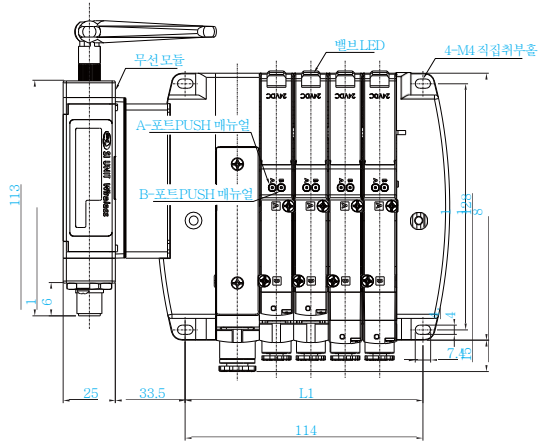


RS1000 Wireless Module

Stn	1	2	3	4	5	6	7	8
L1		66.5	78	89.5	101	112.5	124	135.5
L2		135	146.5	158	169.5	181	192.5	204
Stn	9	10	11	12	13	14	15	16
L1	147	158.5	170	181.5	193	204.5	216	227.5
L2	215.5	227	238.5	250	261.5	273	284.5	296

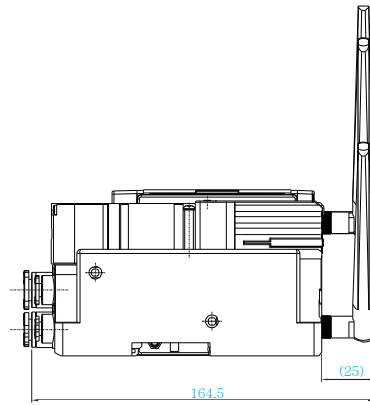
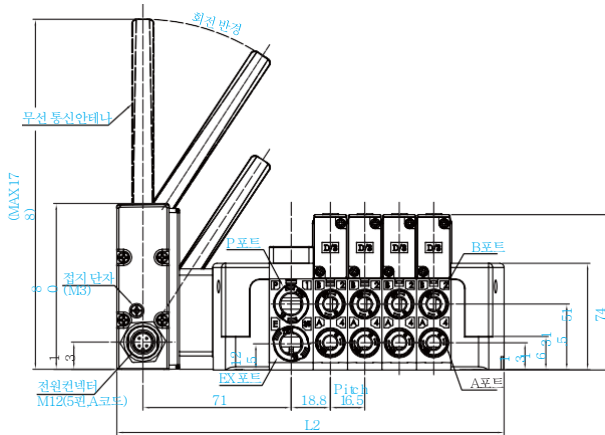


RS2000 Dimensions

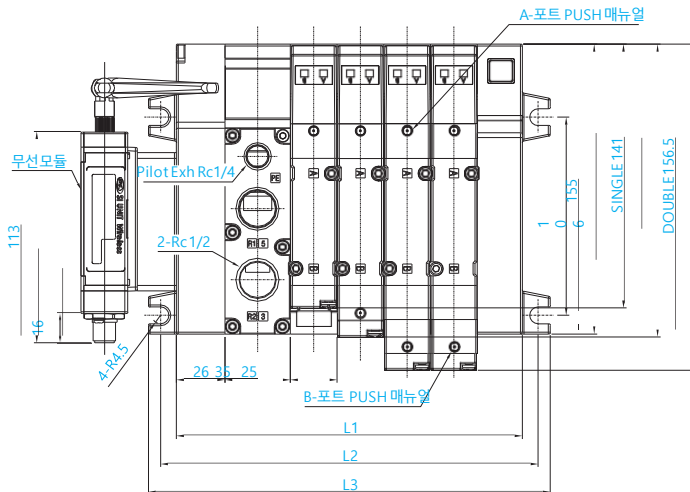


RS2000 Wireless Module

Stn	1	2	3	4	5	6	7	8
L1		81	97.5	114	130.5	147	163.5	180
L2		152.5	169	185.5	202	218.5	235	251.5
Stn	9	10	11	12	13	14	15	16
L1	196.5	213	229.5	246	262.5	279	295.5	312
L2	268	284.5	301	317.5	334	350.5	367	383.5

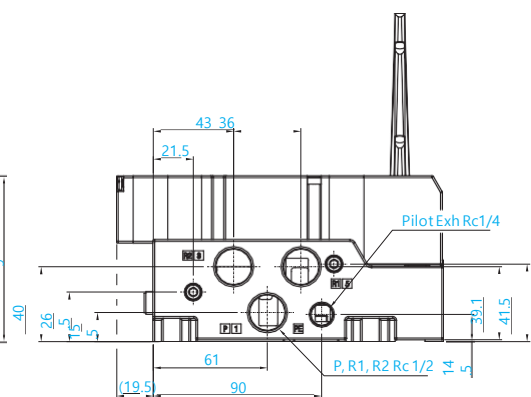
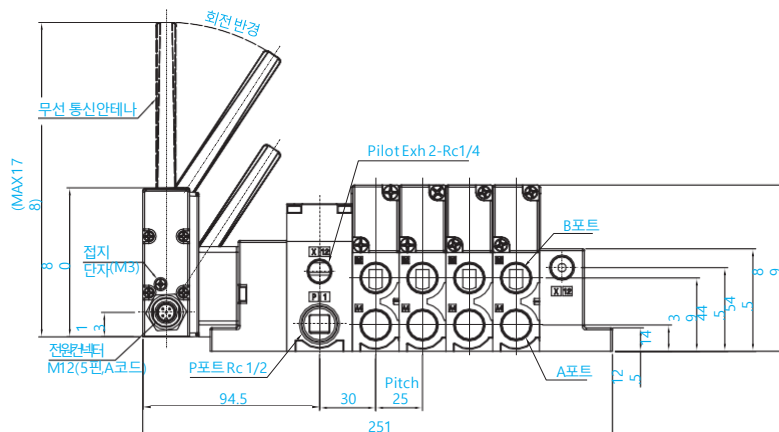


RS4000 Dimensions



RS4000 Wireless Module

Stn	2	4	6	8	10	12	14	16	18
L1	135	185	235	285	335	385	435	485	535
L2	152	202	252	302	352	402	452	502	552
L3	165	215	265	315	365	415	465	515	565



Router BAP(BLE Access Point)

Features

- ARM® Cortex™ M4 32 bit processor
- EtherNet/IP, CC Link IE Field, ProfiNet
- M2M, M2H Interface
- Easy access with mobile phone



How to order

WU1 - B EN

1 2 3

1 WU1 : Wireless Unit

2 B : Base

3 Interface

EN	EtherNet/IP (RJ45)
CL	CC-Link IE Field (RJ45)
PN	ProfiNet (RJ45)

BAP Specifications

Specifications			
Interface	RS232(D SUB_9pin_Female) EtherNet/IP(RJ45) (CC-Link IE Field (RJ45) ProfiNet(RJ45)	Processor	ARM® Cortex -™ M4 32 bit processor
I/O port input power	3 ~ 48 V	RAM	256 Kbyte
Input port	3 ~ 48 V @ 5mA(Min.) x 4 port	Memory	192 Kbyte
Output port	3 ~ 48 V @ 1A(Max.) x 4 port	Power connection	DC Jack, Terminal block
Display LED	Power, State, Serial, EtherNET, Input 1~4, Output 1~4, I/O VCC	Antenna connection	SMA female (BLE)
Dimensions	215 x 105 x 30 mm	Operating voltage	DC 24V
Weight	260g (not including lead wire)	Operating temp.	-20 °C to +70
Button	Reset, User	Current consumption	80 mA(Standby), 20W(Max.)

BLE Sensor Tag (Wireless magnetic sensor)

Features

- ARM® Cortex™ M4 32 bit processor base
- EtherNet/IP, CC Link IE Field, ProfiNet
- M2M, M2H interface
- Easy access with mobile phone
- Applicable with various cylinders

How to order

WU1 - S M1 - HB - B50

1 2 3 4 5

1 WU1 : Wireless Unit

2 S : Sensor

3 M1 : Magnetic sensor

4 Bracket

HB	Hose band mounting (Round cylinder)
TS	T slot mounting (Compact cylinder)
CR	Round rail mounting (Compact cylinder)
NP	Side mounting (Plate cylinder)

5 Hose Band

Blank	Hose Band not included
B32	Ø32 round tube
B50	Ø50 round tube
B63	Ø63 round tube
B80	Ø80 round tube

* Please contact us for options other than above

Specifications

Specifications			
Operating frequency	2.400 to 2.4835 GHz	Processor	ARM® Cortex -™ M4 32 bit processor
Bluetooth	Bluetooth Low Energy (BLE 5.0)	RAM	24 Kbyte
Speed	< 1 Mbps	Memory	192 Kbyte
RF power output	Max. +4 dBm	LED	1EA (RGB, 3color)
Receiver sensitivity	-96 dBm @ 1Mbps BLE ideal transmitter	Number of button	1EA (Tact)
Dimensions	45.3 x 21.6 x 20.4 mm	Operating voltage	DC +2.8 ~ 3.6 Vdc
Weight	20g	Quiescent current	1~2uA
Battery	DC 3V@ 850mAh x 1EA	Current consumption	5uA (per 1 time detection per minute)
Operating temperature	-20 °C to +70	Communication distance	20m
IP grade	IP67	Battery life time	Approx. 5 years

※ Upgraded wireless sensor will be available soon

