

# V720

## V720 series RFID system

The V720 Series provides our business partners with the RFID system components, including the tag inlet, ID controller, read/write antenna, read/write module, and demonstration kit. These are the key components for the total solution implemented by system integrators and end users.

### V720 Series Application Examples

- Carry-on baggage control
- Supply-chain management
- Library book and document management
- Museum collection management
- High-end name-brand product management
- Facility and equipment maintenance management

### Product lineup

Product	Model	Shape/specification
Tag Inlet	V720□-D□□P□□-R1K(1,000 pcs)	1,000 pcs. per roll
	V720□-D□□P□□-R5K(5,000 pcs)	5,000 pcs. per roll
ID Tag	V720S-D13P	Approx. 54 × 86 mm
Read/Write Antenna	V720S-H01	250 × 200 × 35 mm 10 cm cable (The connector is not waterproof.)
ID Controller	V720S-CD□D	24 VDC Single channel antenna 90 × 65 × 75 mm ● V720S-CD1D RS-232C host interface ● V720S-CD2D RS-485 host interface
Antenna	V720-HS03	334 × 407 × 46 Conforms to IP65 (IEC 60529)
Gate Antenna	V720-HS71 (Dual Antenna Configuration) V720-HS71S (1-Antenna Configuration)	622 × 1597 × 120 mm (Dimensions of single antenna configuration) Available in dual antenna or single antenna configuration. (Communications range varies according to configuration. Consult your OMRON representative for details.)
Reader/Writer	V720S-BC5D4	247 × 128 × 64 mm Also connectable to antennas other than the V720-HS03 and V720-HS71. Consult your OMRON representative.
Antenna Cable	V700-A4□	The connector is not waterproof. Material: Vinyl chloride Select from 3 m, 5 m, 10 m, 20 m, or 30 m cables.
	V720-A40□.□m	Select from 3.35 m or 10.35m
RS-232C Cable	V720-A60□.□m	Special for BC5D4 Select from 3 m or 15 m cables.
Power Cable	V720-A50 3m	Special for BC5D4 3 m
PCB-type Read/Write Module	V720S-HMC73 (One-unit type)	5 VDC 40 × 44 × 14 mm A Read/Write Antenna and controller function are built into a compact module, which facilitates mounting to other devices.
	V720S-HMC73T (Separate type)	5 VDC 40 × 44 × 1 mm 40 × 44 × 9 mm
CF Card-Type RFID Unit	V720S-HMF01	52 × 35 × 16 mm (The dimension of the portion of the antenna extending from the PDA when the unit is mounted in the PDA.) Combining the unit with a PDA will make a portable RFID reader/writer.
Demonstration Kit	V720S-W01-2	480 × 300 × 160 mm The Demonstration Kit comprises a Read/Write Antenna and an ID Controller. This is a kit for system evaluation and sales promotion available at a reasonable price.

### A variety of functions

The system is equipped with single-access, simultaneous multiple access, selective access, and FIFO functions, which are the basic functions of the RFID system.

### Flexibility

Innovative progress in technology produced a more flexible tag. OMRON provides extra-thin tag inlets easily processed to fit the size and usage that meet various customer needs.

### Four characteristics

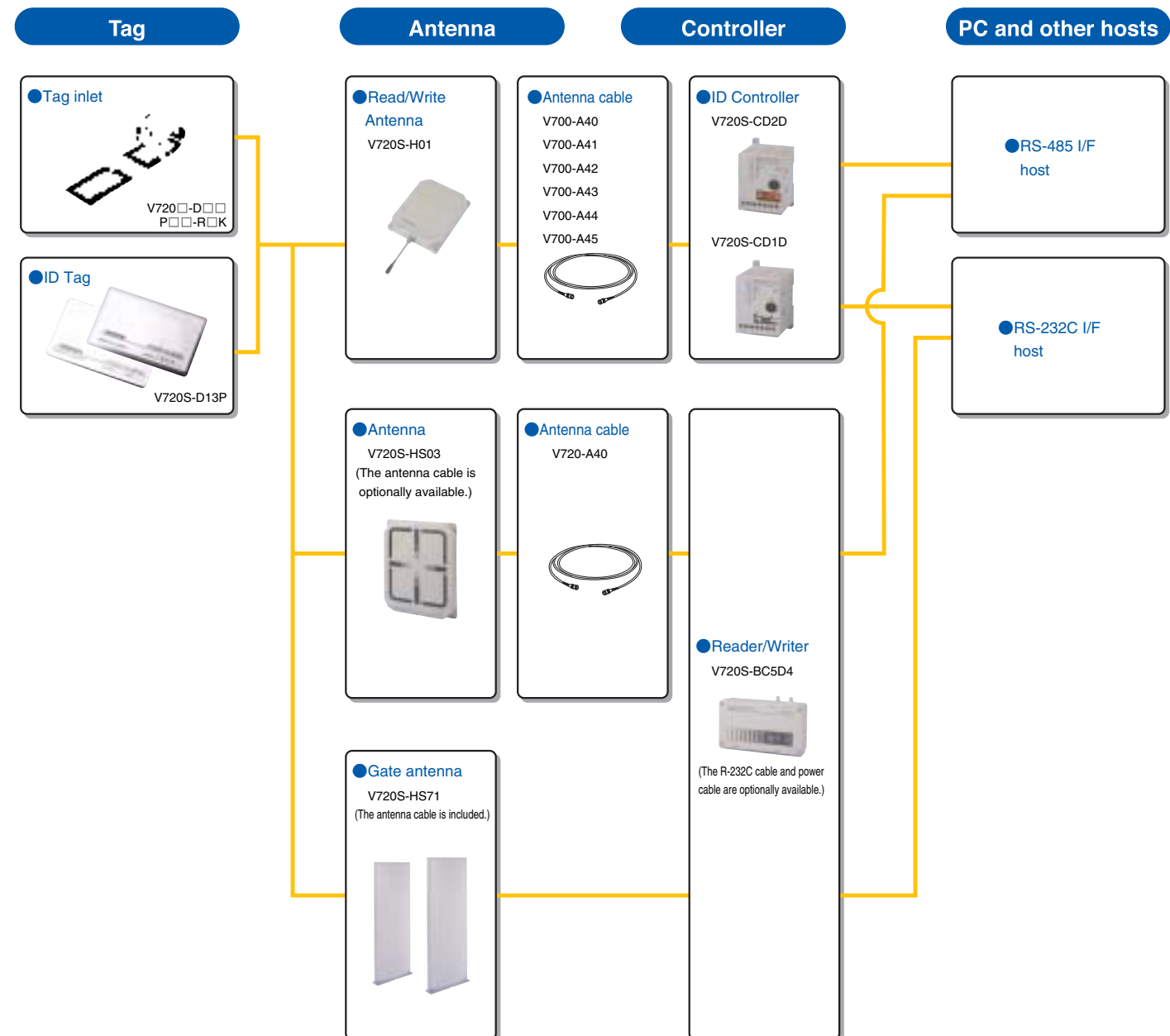
### Compliance to international standards

V720 Series is in compliance with the trend in international standardization by adopting Philips I.CODE technology that conforms to the ISO 15693 standard.

### Low cost

OMRON offers affordable-priced, high-quality products backed by the commitment to low-cost-oriented production systems based on state-of-the-art technologies and economies of scale.

### System Configuration



Consult your OMRON representative regarding the recommended power sources, included cables or other devices.



OMRON's Smart Labels conform to the ISO 15693 international standard. Smart Labels are super thin and highly flexible, making them one of the most cost-effective among the ID tags.

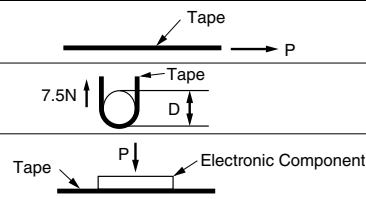
### Features and Benefits

- Conforms to ISO 15693, the international standard for contactless IC cards.
- Withstands bending.
- Adopted I.CODE chip technology by Royal Philips Electronics.
- Easy secondary processing into business forms (roll-to-roll).
- Thin and flexible.

### General Specifications

Item	V720-D52P03/04	V720S-D13P01/02/06
Applicable chip	I.CODE 1	I.CODE SLI
Memory capacity	44 bytes (user area)	112 bytes (user area)
Memory type	64-byte EEPROM	128-byte EEPROM
Communications frequency	13.56 MHz	
Data retention time	10 years after data is written (at 55°C and lower)	
Number of data rewrites	100,000 times for each address	
Ambient temperature in operation	-10 to 70°C (non icing or condensing)	
Ambient temperature in storage	-30 to 70°C (non icing or condensing)	
Heat resistance	No communications error after leaving the product in ambient atmosphere at 85°C for 250 hours	
Cold resistance	No communications error after leaving the product in ambient atmosphere at -30°C for 250 hours	
Thermal shock resistance	No communications error after 100 test cycles, where a cycle is a high temperature exposure (the product is left at -30°C ambient atmosphere for 30 minutes) followed by low temperature exposure (the product is left at 85°C ambient atmosphere for 30 minutes).	
Vibration resistance	Resistance: No abnormality after sweeping variable vibration of 10 Hz to 2 kHz, 1.5 mm double amplitude at 150 m/s <sup>2</sup> in the X, Y, and Z directions 10 times for 15 minutes each.	
Shock resistance	Resistance: No abnormality after applying a 500 m/s <sup>2</sup> shock in the X, Y, and Z directions three times each for a total of 18 times.	
Moisture resistance	No communication error after leaving the product in ambient atmosphere at 85°C with 85% humidity for 250 hours	
Standard price (yen)	Contact your OMRON representative separately.	

Item	V720S-D13P01	V720S-D13P02	V720S-D13P06	V720-D52P03	V720-D52P04
Tape tension (P)	< 10 N				
Bending diameter (D)	> φ 20 mm				
Static pressure (P)	< 10 MPa (10 N/mm <sup>2</sup> )				



### Roll Delivery Form

Item	V720S-D13P01	V720S-D13P02	V720S-D13P06	V720-D52P03	V720-D52P04
Appearance	Single-row roll form				
Number of units per roll	1,000 pcs. (V720□-D□□P□□-R1K) and 5,000 pcs. (V720□-D□□P□□-R5K)				
Sheet length (1,000 pcs./5,000 pcs.)	Approx. 100/500 m	Approx. 50/250 m	Approx. 33/167 m	Approx. 33/167 m	Approx. 33/167 m
Roll core	Inner diameter of 76.2 mm				
Outer diameter of roll (1,000 pcs./5,000 pcs.)	160/260mm	155/210mm	150/200mm	150/200mm	150/200mm
Weight (1,000 pcs./5,000 pcs.)	0.7/2.4kg	0.6/1.4kg	0.7/1.5kg	0.5/1.0kg	0.5/1.0kg

### Communications Range\*1 (Measured at t = 25°C)

Reference value	V720S-D13P01	V720S-D13P02	V720S-D13P06	V720-D52P03	V720-D52P04
V720S-H01					
Read	250	210	160	80	70
Write	250	210	160	75	65
V720S-HMC73					
Read	50	45	35	20	20
Write	50	45	35	5~20	5~20

\*1. The communications range may be affected by environmental noise or members around the product. Secondary processing of the inlet with extremely high heat or pressure may affect the communications range. Please consult your OMRON representative.



V720S-D13P40



V720S-D13P30

OMRON's V720-Series ID Tags conform to the ISO 15693 international standard. The ID Tags are available in two types: tags sealed in PET resin (V720S-D13P40) and those pouched in PET sheets (V720S-D13P30). The ID Tags are applicable to testing and evaluation of the RFID system. Consult your OMRON representative for a variety of ID Tag samples.

### Features and Benefits

- Conforms to ISO 15693, the international standard for contactless IC cards.
- Adopted I.CODE chip technology by Philips.

### General Specifications

Item	V720S-D13P30/40
Applicable chip	I.CODE SLI
Memory capacity	112 bytes (user area)
Memory type	128-byte EEP-ROM
Communications frequency	13.56 MHz
Data retention time	10 years after data is written (55°C and lower)
Number of data rewrites	100,000 times for each address
Ambient temperature in operation	-10 to 70°C (non icing or condensing)
Ambient temperature in storage	-30 to 70°C (non icing or condensing)
Degree of protection	IEC60529, IP67
Material	PET resin
Shock resistance	Resistance: No abnormality after applying 500 m/s <sup>2</sup> shock in the X, Y, and Z directions three times each for a total of 18 times.
Vibration resistance	Resistance: No abnormality after sweeping variable vibration of 10 to 2,000 Hz, with 1.5 mm double amplitude at 100 m/s <sup>2</sup> in the X, Y, and Z directions 10 times for 15 minutes each.
Weight	V720S-D13P40: Approx. 4 g, / V720S-D13P30: Approx. 2g

### Communications Range\*1 (Measured at t = 25°C)

Model	V720S-D13P30 V720S-D13P40
V720S-H01	0~250mm
V720S-HMC73□	0~30mm

\*1. The communications range may be affected by environmental noise or members around the product. Check for possible influence before use.



V720S-BC5D4

By connecting to a V720-HS03 Antenna or V720-HS71 Gate Antenna, OMRON's Reader/Writer enables the industry's top-level communications range for the ID Tag/Tag Inlet.

### Features and Benefits

- Two antenna terminals available for use in a variety of applications.
- Includes RS-232C and RS-485 interfaces for the host.
- Allows multi-drop connection to up to 32 antennas.
- Both I.CODE1 and I.CODE SLI types are available.
- Durable construction conforms to IP65 standard.
- Inherits the user-friendly host command structure of the previous OMRON series.
- Conforms to overseas and domestic radio laws.

### General Specifications

Item	Specifications
Communications frequency	13.56 MHz
Ambient temperature in operation	-10 to 55°C (non icing)
Degree of protection	IEC 60529, IP65
Power supply voltage*	24VDC ± 10%
Power consumption	25 W and lower
Dimensions	247(W) × 64(H) × 128(D) mm
Antenna output impedance	50 Ω
I/O interface	Input:4signals (IN1,IN2,IN3,RESET), Output:4signals (OUT1,OUT2,OUT3,OUT4)
Host interface	COM1 (RS-232C/RS-485), COM2 (RS-232C) 9600 to 115200 bps
Applicable standards	R and TTE, FCC part 15
Weight	Approx. 2.3 kg

\*24 VDC power supply is required. Consult your OMRON representative for recommended power supplies.

### ● Optionally available cables for the Reader/Writer

Item	Model	Length per cable	Standard price (yen)
R-232C cable	V720-A60 3m	3m	19,000
	V720-A60 15m	15m	29,000
Power cable	V720-A50 3m	3m	14,500

\*Power supplies and connection cables for host machines, such as PCs, are also available. Consult your OMRON representative for these items.

### Communications time (reference values)

Communications time refers to the time required for the communication between the antenna and ID Tag, excluding the time for communication with the host.

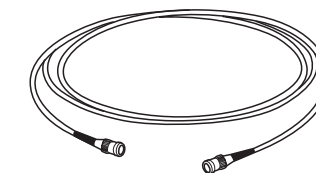
- Calculating formula for fast mode. unit : msec

Command	Communications time
Read	$T=1.3N+18.0$
Write	$T=13N+18.0$

\* T = communications time (msec), N = number of pages, the minimum access unit is page (4 bytes).



V720-HS03



V720-A40 3.35m

OMRON's antenna enables the industry's top level communications range for the OMRON ID Tag/Tag Inlet with connection to a V720S-BC5D4 Reader/Writer. The cables for the Reader/Writer (V720-A40□.□m) are released simultaneously.

### Features and Benefits

- The performance is 1.6 times higher in communications range and 2.6 times higher in communications area as compared with OMRON's standard antenna (V720S-H01).

### General Specifications

- Antenna

Item	Specifications
Communications frequency	13.56MHz
Input impedance	50 Ω
Ambient temperature in operation	-10 to 55°C (non icing)
Ambient humidity in operation	35% RH to 85% RH (non condensing)
Dimensions	334(W) x 46(H) x 407(D) mm
Degree of protection	IEC 60529, IP65
Weight	Approx. 2.5 kg

- Antenna Cable

Item	Specifications
Cable length	3.35m (V720-A40 3.35m) 10.33m (V720-A40 10.33m)



V720-HS71

OMRON's Gate Antennas can be connected to a host device via the V720S-BC5D4 Reader/Writer. Using OMRON V720S-D13P40 ID Tags, the communications distance between the gates can be up to 1 m.

### Features and Benefits

- Gate Antennas are applicable to a variety of gate applications, such as the logistics and rental item management systems.
  - The single-lane configuration enables long-distance communications range with a gate width of up to one meter.
  - Compatible with three tag directions. Gate width: 1 m (lane width: approx. 90 cm).
  - Supports the EAS (electronic article surveillance) function, and simultaneously reads multiple tags.
  - Supports either two antennas (single-lane configuration: V720-HS71) or one antenna (single configuration: V720-HS71S). (The communications area varies, depending on the configuration. Consult your OMRON representative for details.)
- The high-performance RFID system with connectivity to the Reader/Writer, stand-alone EAS mode without connecting to the host computer, 1 to 1 or 1 to N multi-access mode communications between tag and antenna are available.

### General Specifications

Item	V720-HS71	V720-HS71S
Communications frequency	13.56MHz	
Ambient temperature in operation	-10 to 50°C (non icing)	
Ambient humidity in operation	35% RH to 85% RH (non condensing)	
Degree of protection	IEC 60529, IP40	
Weight	Approx. 16.5kg	
Dimensions	622(W) × 1597(H) × 120(D)mm	
Color	Side panel: Ivory white	
Cabinet	Side frame: aluminum, Cover: PC/ABS resin, Base: stainless steel	
Cable length (accessory)	Between Antenna and Reader/Writer: 3.5 m Between Antennas: 2.4 m	
Mounting	Fixed with two M12 anchor bolts (Consult your mounting contractor regarding the anchor bolts.)	



V720S-CD1D



V720S-CD2D

OMRON's ID controllers have a variety of access functions and general-purpose host interfaces to support a wide range of applications. Connection to the Read/Write Antennas (V720S-H01) will configure an RFID system. The ID controller (V720S-CD□D) supports I.CODE 1 and I.CODE SLI.

### Features and Benefits

- Equipped with single access (1 to 1), multiple access (1 to n), selective access, and FIFO queue functions.
- Conforms to the EC Directive and US FCC standards.
- Compact and easy to install.
- RS-232C or RS-485 command/response interface to the host.
- Equipped with a general-purpose interface to facilitate the connection to the host device.

### General Specifications

	V720S-CD1D	V720S-CD2D
Host interface	RS-232C	RS-485 (Maximum number of connectable controllers: 10)
Number of connectable Antennas	1	
Power supply voltage*	DC24V +10%-15%	
Power consumption	20 W and lower (including the power consumption of the Read/Write Antenna)	
Insulation resistance	20 MΩ and higher (by a 100 VDC megger): between the ground and power supply terminals, power supply and I/O terminals, power supply terminal and cable, input and ground terminals, I/O terminal and case, and ground terminal and case	
Dielectric strength	Leakage current of 1 mA and less with a 500 VAC (50/60 Hz) applied for 1 minute between the above terminal combinations.	
Vibration resistance	Resistance: No abnormality after a sweeping variable vibration of 10 to 150 Hz .02 mm double amplitude in the X, Y, and Z directions 10 times for 8 minutes each.	
Shock resistance	Resistance: No abnormality after applying 150 m/s <sup>2</sup> shock in the X, Y, and Z directions three times each for a total of 18 times.	
Ambient temperature in operation	-10 to 55°C (non icing)	
Ambient humidity in operation	35% RH to 85% RH (non icing)	
Ambient temperature in storage	-25 to 65°C (non icing)	
Grounding	Class D grounding (former Class 3 grounding) is required. The communication specifications are susceptible to environmental factors without establishing a ground.	
Type	Panel mounted	
Material	PC/ASA resin	
Weight	Approx. 290 g	
Applicable Standards	EN55022, EN55024	

\*24 VDC power supply is required. Consult OMRON for recommended power supplies.

### Communications time (Reference value)

Communications time refers to the time required for the communication between the Read Antenna and ID Tag, excluding the time for communication with the host.

- Fast mode

	Communications time (msec)
Read	$T = 1.3N + 12.7$
Write	$T = 13N + 13.5$

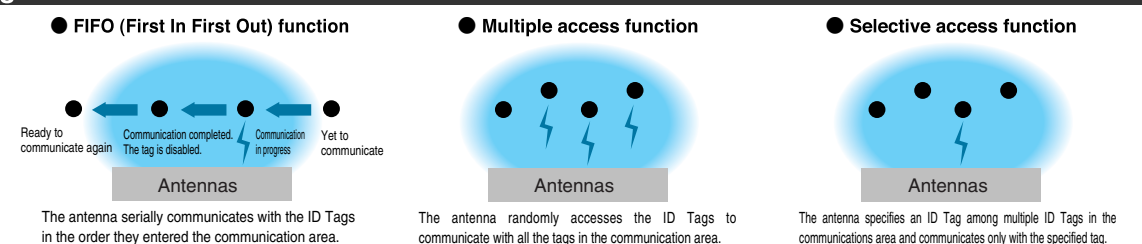
- Communications time for multiple access

The communications time for the executions of multiple-communication commands vary, depending on various factors. Obviously, the size of the processed data is one such factor. Another factor is the number of tags in the communications area. The average communications time with these factors taken into account is shown in the table below. (msec)

Number of tags	Value specified for the tags	Two-page (8-byte) Read	Two-page (8-byte) Write
		Fast mode	Fast mode
2	2	144	190
4	3	301	378
8	4	644	784
16	5	1391	1656

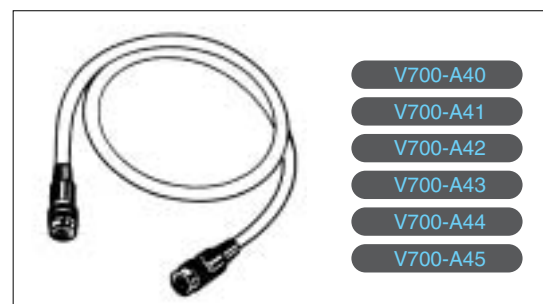
\* T = communications time (msec), N = number of pages, the minimum access unit is page (4 bytes).

### Multiple-tag access function





V720S-H01



- V700-A40
- V700-A41
- V700-A42
- V700-A43
- V700-A44
- V700-A45

OMRON's standard antennas have a maximum communications distance of 25 cm with OMRON smart labels. By connecting the V720S-H-1 Read/Write Antenna to the ID Controller (V720S-CD1D, V720S-CD2D) via the V700-A4□ Antenna Cables, a complete RFID system is built.

### Features and Benefits

- V720S-H01 is a Contactless IC Card System. (Conforms to the Radio Law)
- A maximum communications range of 25 cm.
- The cables are available in six different lengths.
- Easy to install
- Conforms to the EC Directive and US FCC standards.
- Highly precise reading capability under challenging conditions with soil and dust.

### General Specifications

Item	Specifications
Communications frequency	13.56MHz
Ambient temperature in operation	-20 to 55°C (non icing)
Ambient temperature in storage	-35 to 65°C (non icing)
Ambient humidity in operation	35% RH to 85% RH (non condensing)
Insulation resistance	20MΩ and higher (by a 100 VDC megger) between the rear plate and case
Dielectric strength	Leakage current of 1 mA and less when 1,000 VAC (50/60 Hz) is applied for 1 minute between the rear plate and case.
Degree of protection	IEC 60529 IP40 (except the connector)
Vibration resistance	Resistance: No abnormality after a sweeping variable vibration of 10 to 150 Hz frequency with 0.7 mm double amplitude in the X, Y, and Z directions 10 times for 8 minutes each.
Shock resistance	Resistance: No abnormality after applying 150 m/s <sup>2</sup> shock in the X, Y, and Z directions three times each for a total of 18 times.
Cable length	0.1 m (up to a 30 m long extension cable is used for connecting to the ID controller.)
LED indicators	Power indicator: green, Communication indicator: orange
Weight	Approx. 750 g
Applicable standards	EN 300 330, ETS 300 683, EN 60065, FCC Part 15 Subpart C, Wireless Card System (ARIB STD-T60)

Optionally available cable for antenna /V700-A4 □

	A40	A41	A42	A43	A44	A45
Cable length	2m	3m	5m	10m	20m	30m
Standard price (yen)	11,800	12,900	13,500	15,000	18,000	21,000

\*The connectors are not waterproof. Material: vinyl chloride



V720S-HMF01

OMRON's CF Card-Type RFID Unit integrates the RF module and CF card in one unit. By combining with a PDA, it operates as a portable RFID reader/writer.

### Features and Benefits

- Compatible with OMRON's V720 Series ID Tags and completely conforms to ISO/IEC 15693.
- Conforms to the extremely low power radio station.
- Supplied with a compact flash card interface connectable to a PDA
- Combination with a PDA provides a low-cost, portable RFID reader/writer.
- Compact in size and equipped with a read/write function.
- Inherits the user-friendly host command structure of the previous OMRON Series.

### General Specifications

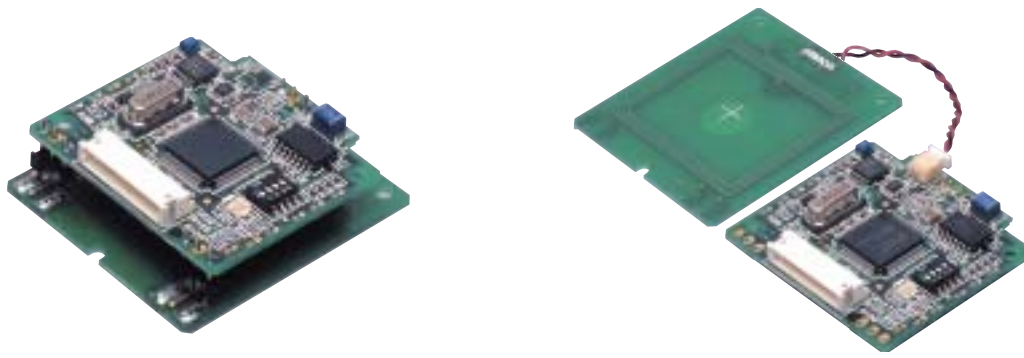
Item	Specifications
Communications frequency	13.56MHz
Ambient temperature in operation	0 to 55°C (non icing)
Degree of protection	Conforms to IP 40
Power supply voltage	3.3VDC ± 5%
Dimensions	52(W) × 35(H) × 16(D)mm(The dimension of the portion of the antenna extending from the PDA when the unit is mounted on the PDA.)
Current consumption	oscillating: approx. 175 mA and less; not oscillating: approx. 100 mA and less
Communications range	3 cm (maximum range for the V720S-D13P40 model)
Host interface	Compact Flash Type II (9600 bps)
Applicable standard	Extremely low power radio station

### Communications time (Reference value)

Command	I.CODE 1	I.CODE SLI
Read	T=1.3N+6.2	T=1.3N+6.0
Write	T=13N+13.5	T=13.6N+15.5

\* T = communications time (msec), N = number of pages, the minimum access unit is page (4 bytes).

\* The time here refers to the processing time of the communication between the CF Card-Type RFID Unit and a tag, assuming the specified read/write target pages are consecutive.



V720S-HMC73

V720S-HMC73T

OMRON's PCB-type Read/Write Modules are available as a one-unit type (V720S-HMC73) or a separate type (V720S-HMC73T), according to the mounting space. The modules are best suited for built-in applications.

### Features and Benefits

- Supports both Royal Philips Electronics I.CODE 1 Tags and ISO/IEC 15693-compliant I.CODE SLI tags.
- Compact in size and equipped with a read/write function.
- Conforms to extremely low power radio stations.
- One unit and separate types are available
- Inherit the user-friendly host command structure of the previous series.

### General Specifications

Item	V720S-HMC73	V720S-HMC73T
Mounting	M2.3 screw mounting at three points	M2 screw mounting at two points (circuit board) M2.3 screw mounting at three points (antenna board)
Communications frequency	13.56 MHz	
Ambient temperature in operation	-10°C ~ +55°C	
Power supply voltage	DC5V ± 10%	
Current consumption	Approx. 70 mA and less (oscillating), approx. 20 mA and less (not oscillating)	
Vibration resistance	10 to 150 Hz, 0.1 mm single amplitude at 50 m/s <sup>2</sup> in three directions, ten times for 8 minutes each	
Shock resistance	Resistance 150 m/s <sup>2</sup> three times each in six directions	
Communications system	Two-wire half duplex serial communication system (CMOS level) (*1)	
Connector	S10B-ZR-SM3A-TF (JST Mfg. Co., Ltd.)	
Communications control system/ baud rate	CR control/Character control/9,600 bps/38,400 bps	
Weight	Approx. 12 g	
Applicable standards	Extremely low power radio station	

\*Note: The device cannot be connected to an RS-232C interface directly. Should the connection to an RS-232C interface be required, consult your OMRON representative.

### Communications time (Reference value)

Command	I.CODE 1	I.CODE SLI
Read	T = 1.3N + 6.2	T = 1.3N + 6.0
Write	T = 13N + 13.5	T = 13.6N + 15.5

\* T = communications time (msec), N = number of pages, the minimum access unit is page (4 bytes).

\* The time here refers to the processing time of the communication between the PCB-Type Read/Write Module and a tag, assuming the specified read/write target pages are consecutive.

This Demonstration Kit for the V720-Series product demonstration, evaluation, and application development includes the associated equipment, user's manual, and demonstration software.

### Features and Benefits

- The development kit provides RFID equipment that conforms to the ISO 15693 international standard, a user's manual, and demonstration software all in one package.

### Model/Standard price

Model	Designation	ID Tags included in the kit	Standard price (yen)
V720S-W01-2	V720S Demonstration Kit	—	350,000

### Demonstration Kit contents

No	Product	Model	QTY
1	Read/Write Antenna	V720S-H01	1
2	ID Controller	V720S-CD1D	1
3	Antenna Cable (2 m)	V700-A40	1
4	Screwdriver	—	1
5	Ferrite Core	ZCAT2032-0930	1
6	Power Supply Unit	S82K-03024	1
7	Power cable	—	1
8	Interface Cable (RS-232C)	—	1
9	Demonstration Software, Demonstration Software Operational Manual (CD-ROM)	—	1
10	Dimensions	488mm × 321mm × 160mm	
11	Weight	Approx. 5.2 kg	



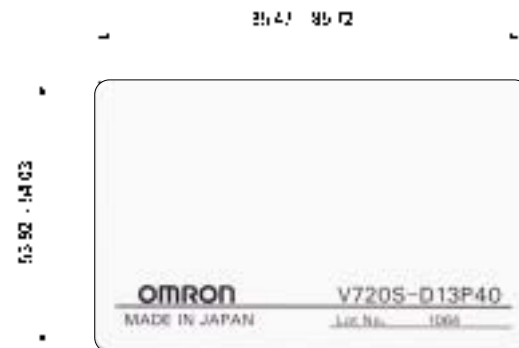
# V720 Series Dimension List

## Tag Inlets (P13)

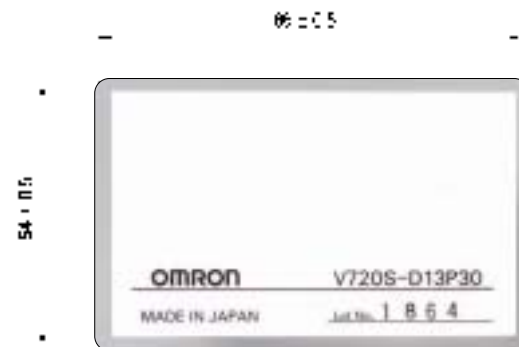
Item	V720S-D13P01	V720S-D13P02	V720S-D13P06	V720-D52P03	V720-D52P04	<p>Tag Inlet Dimension</p> <p>Core inner diameter: 76.2 mm</p> <p>48 mm (or 70 mm)</p> <p>Roll delivery form</p>
Width	48 ± 1.0mm		70 ± 1.0mm	48 ± 1.0mm		
Pitch between the coils	96 ± 0.3mm	48 ± 0.3mm	32 ± 0.3mm	32 ± 0.3mm	32 ± 0.3mm	
Thickness at electronic parts	Max. 270 μm					
Overall thickness of the copper antenna coil	50+10 μm/-0 μm					
Size of the antenna coil	46 × 75mm	46 × 43mm	60 × 20mm	φ 21mm	16.5 × 22mm	

## ID Tags (P14)

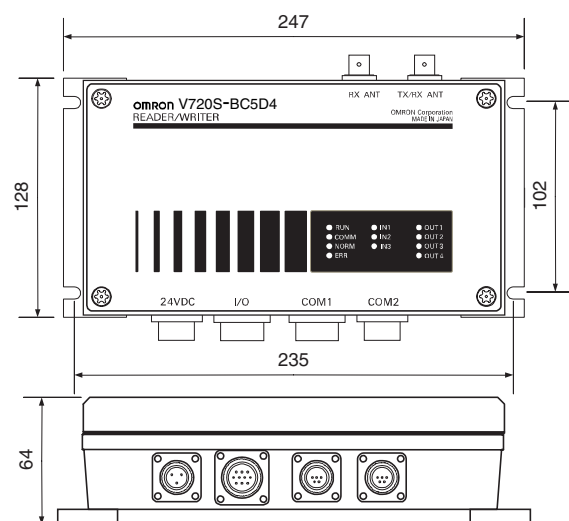
### ● V720S-D13P40



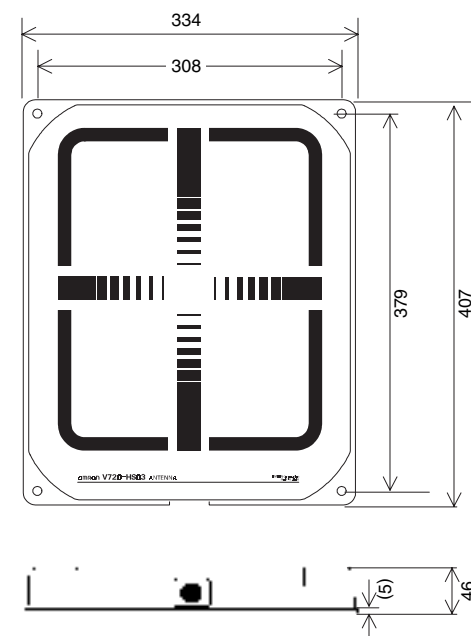
### ● V720S-D13P30



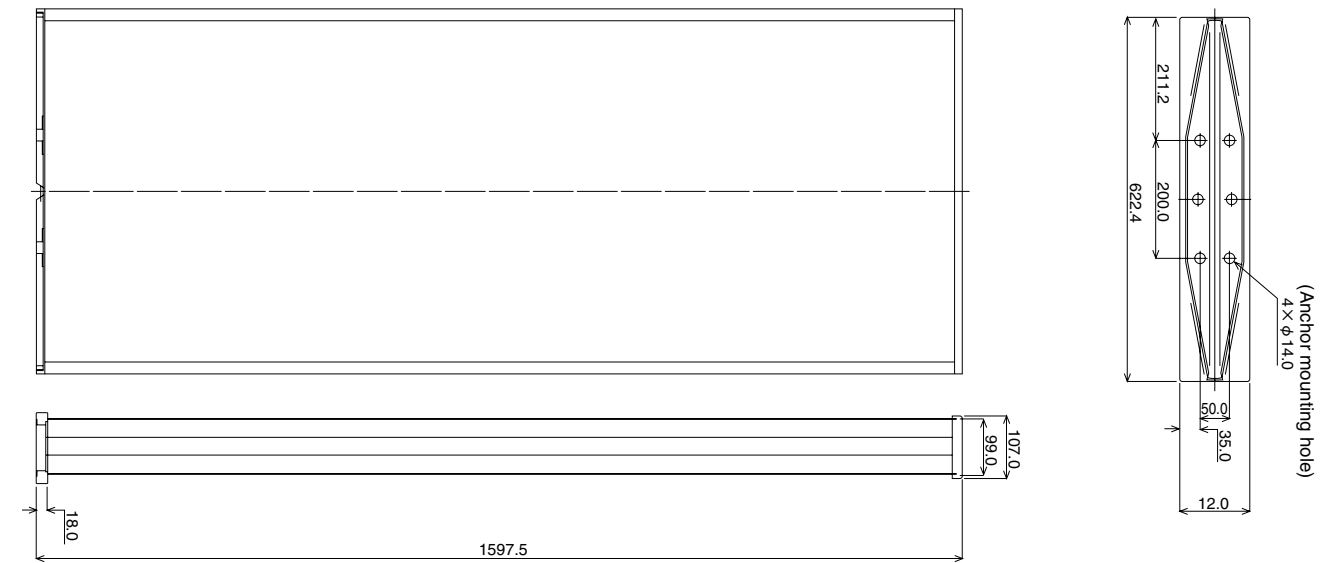
## Reader/Writer (p15)



## Antenna (p16)

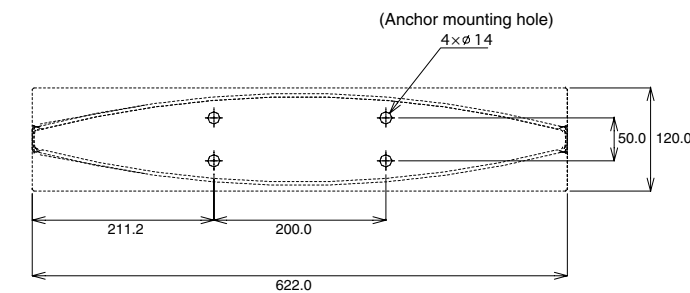


## Gate Antennas (p17)



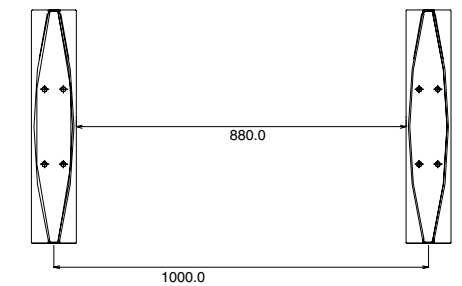
### Dimensional drawings for mounting

#### ● Dimensional drawing of the mounting hole position (top view)



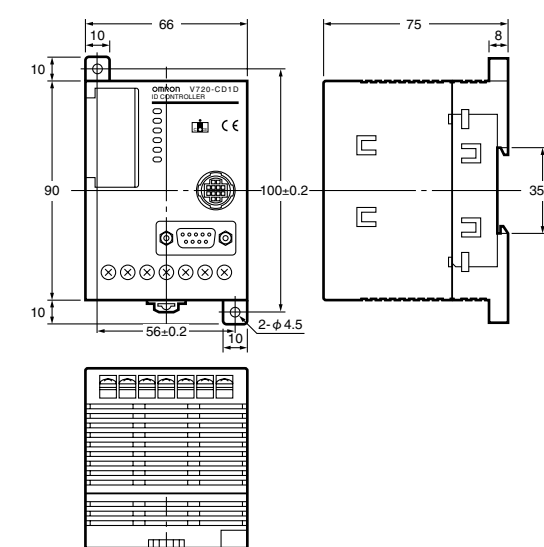
#### ● Antenna positions for the dual-antenna configuration

For the dual-antenna configuration, the antennas should be positioned so that the distance between their centers is 1.0 m (the lane width should be 0.88 m).

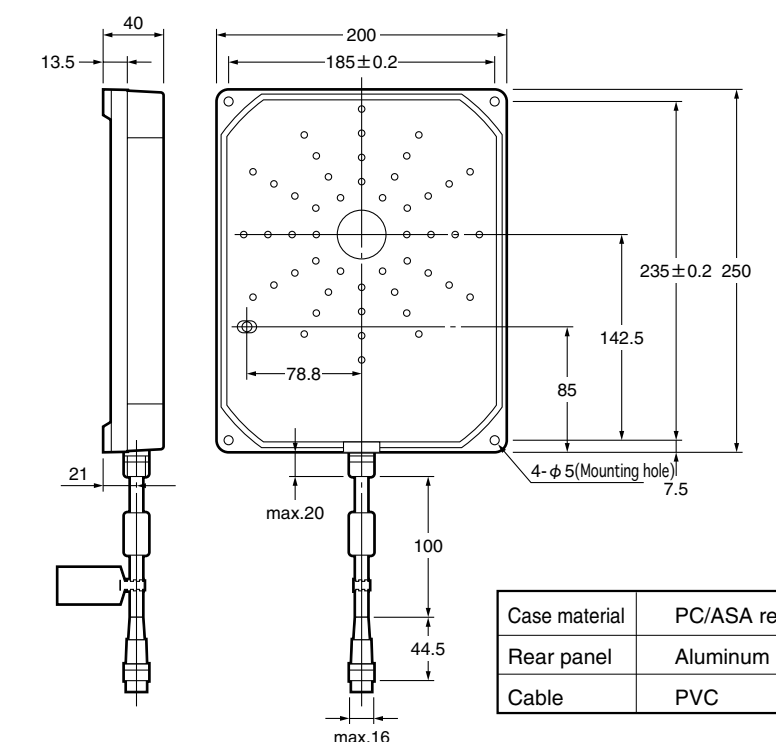


## ID Controller (P18)

### ● ID Controller (V720S-CD□D)



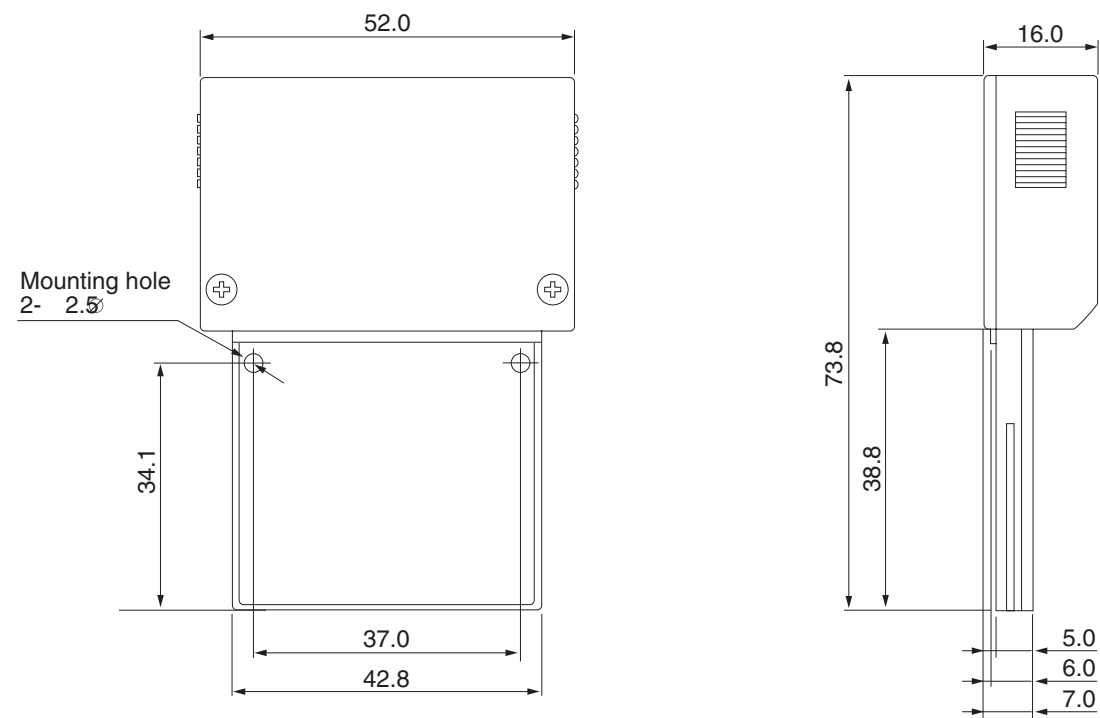
## Read/Write Antenna (P19)



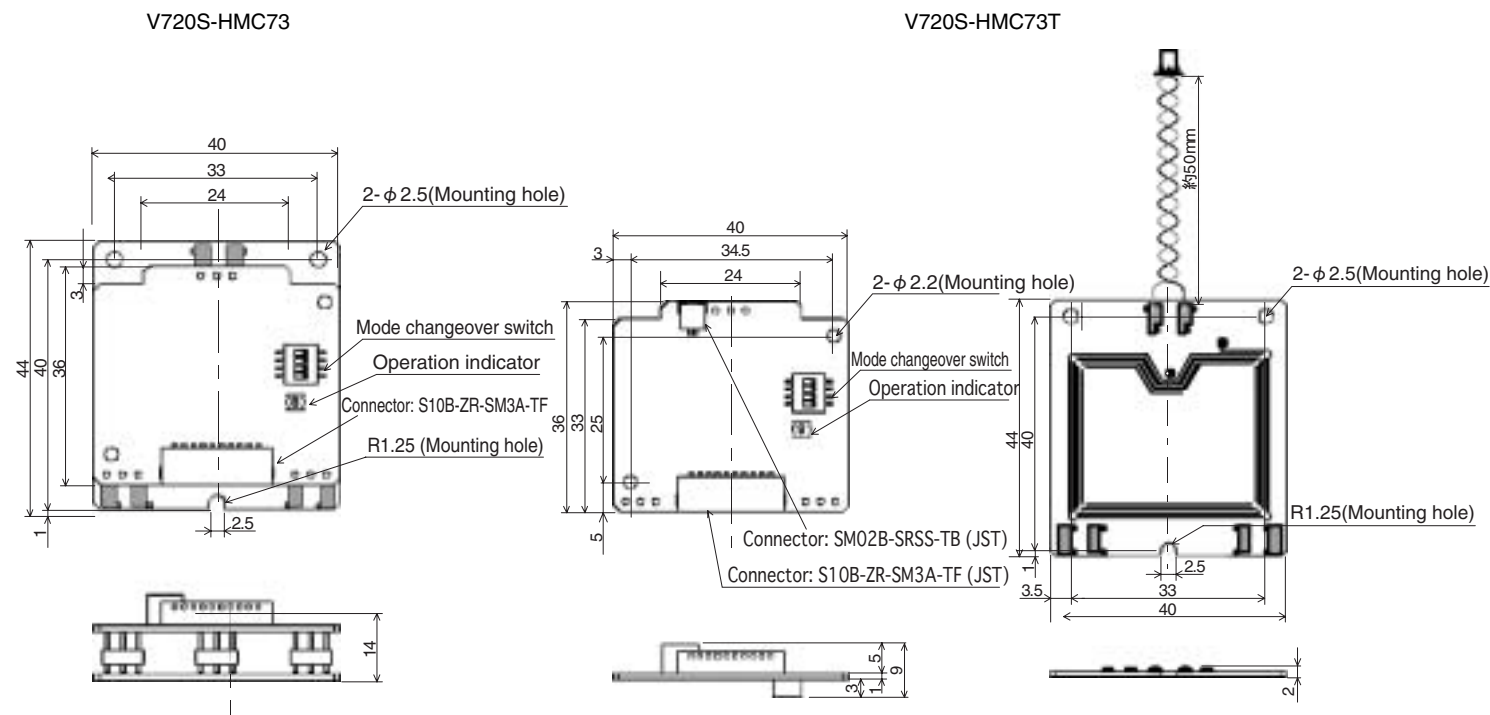
Case material	PC/ASA resin
Rear panel	Aluminum
Cable	PVC

# V720 Series Dimension List

## CF Card-Type RFID Unit (P20)



## PCB-Type Read/Write Modules (P21)

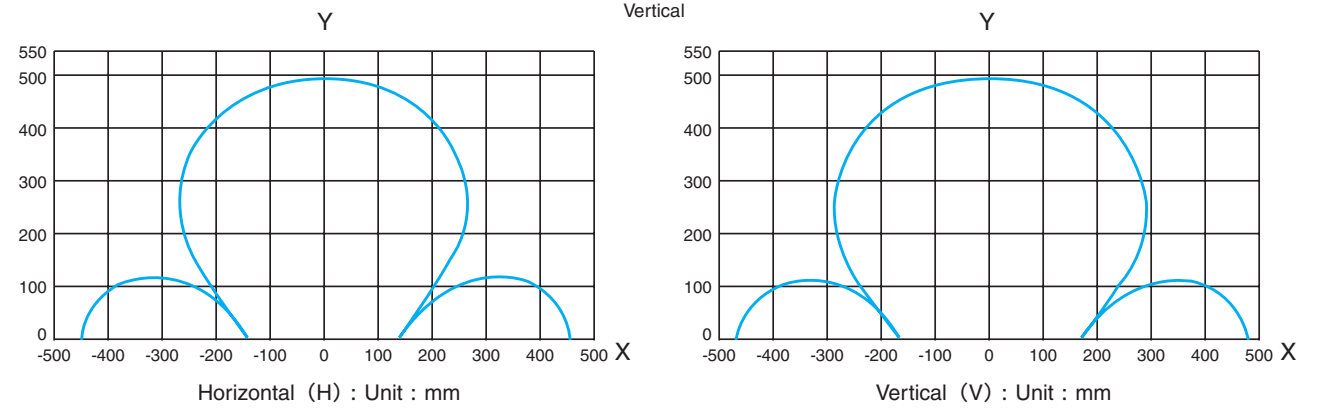
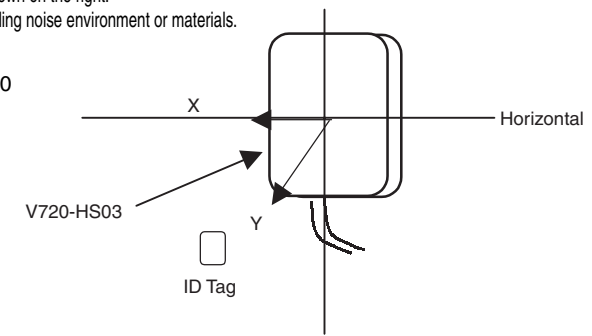


# V720 Series Communicatios Area List

## Antenna (P16): Reference values

The figure for the V720S-HS03 communications area is shown on the right.  
The communications area may be affected by the surrounding noise environment or materials.

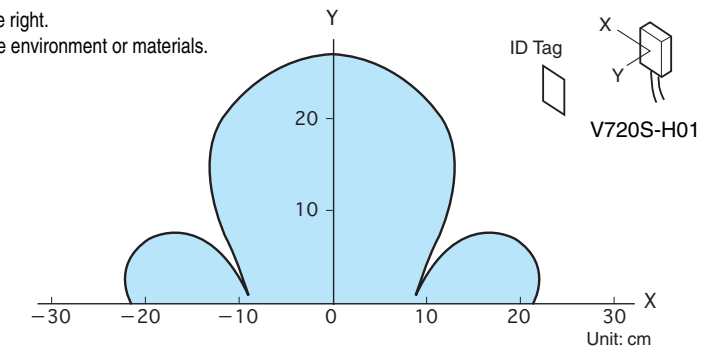
● ID Tag V720S-D13P30/ V720S-D13P40



## Read/Write Antenna (P19): Reference values

The figure for the V720S-H01 communications area is shown on the right.  
The communications area may be affected by the surrounding noise environment or materials.

● ID Tag V720S-D13P30/ V720S-D13P40



## CF Card-Type RFID Unit (P20): Reference values

The communications ranges for the CF Card-Type RFID Unit and Tag Inlets are shown below.

● I.CODE 1 Tag Inlet

Tag Inlet	V720-D52P03	V720-D52P04
Communications range (mm) (measured at t = 25°C)	5 ~ 20	5 ~ 20

● I.CODE SLI Tag Inlet

Tag Inlet	V720S-D13P01	V720S-D13P02
Communications range (mm) (measured at t = 25°C)	50	45

\*The communications range may be affected by the surrounding noise environment or materials.