

# MRA Release note (V1.3.0)

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2024.08.02

- Data version: 1.3.0
- Data format version: 1.2.0
- Appendix Release version: R (rev.2)

The MRA supports Release R (rev.2) and adds several new device and modifies some devices.

## Revision history

<b>Data version</b>	<b>Date</b>	<b>Description</b>
1.0.0	2021.11.17	Official release
1.0.1	2021.12.01	Bug fixes found in validation of the device description created from MRA v1.0.0
1.1.0	2022.05.27	Supports Appendix Release version N, P, P (rev.1). Adds eight kinds of devices. Fixes to Typo, etc. in the English version of Release P.
1.2.0	2023.04.28	Supports Appendix Release version Q, Q (rev.1). Adds a new device.
1.3.0	2023.08.02	Supports Appendix Release version R, R (rev.2). Adds five new devices.

## Additional devices

The following five device objects are additionally released this time.

<b>EOJ</b>	<b>Device name</b>
0x0002	Crime prevention sensor
0x0260	Electrically operated blind/shade
0x02A7	Frequency regulation
0x02A5	Multiple input PCS
0x028F	Bidirectional high voltage smart electric energy meter

## Some modifications

The device objects to be modified and released are the following : super classes and five models.

<b>EOJ</b>	<b>Device name</b>
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EOJ	Device name
0x0000	Super class
0x0263	Electrically operated rain sliding door/shutter
0x0279	Household solar power generation
0x027D	Storage battery
0x02A1	EV charger
0x0288	Low-voltage smart electric energy meter

## MRA Release note (V1.2.0)

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2023.04.28

- Data version: 1.2.0
- Data format version: 1.1.0
- Appendix Release version: Q (rev.1)

The MRA supports Release Q (rev.1) and adds a new device and modifies some devices.

### Revision history

Data version	Date	Description
1.0.0	2021.11.17	Official release
1.0.1	2021.12.01	Bug fixes found in validation of the device description created from MRA v1.0.0
1.1.0	2022.05.27	Supports Appendix Release version N, P, P (rev.1). Adds eight kinds of devices. Fixes to Typo, etc. in the English version of Release P.
1.2.0	2023.04.28	Supports Appendix Release version Q, Q (rev.1). Adds a new device.

### Additional devices

The following a device object is additionally released this time.

EOJ	Device name
0x028E	distributed generator's electric energy meter

### Some modifications

The device objects to be modified and released are the following : super classes and four models.

EOJ	Device name
0x0000	Super class
0x026B	Electric water heater
0x027E	EV charger and discharger
0x0281	Water flowmeter
0x05FF	Controller

## MRA Release note (V1.1.0)

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2022.05.27

- Data version: 1.1.0
- Data format version: 1.1.0
- Appendix Release version: P (rev.1)

The MRA supports Release P (rev.1) and adds several new devices.

### Revision history

Data version	Date	Description
1.0.0	2021.11.17	Official release
1.0.1	2021.12.01	Bug fixes found in validation of the device description created from MRA v1.0.0
1.1.0	2022.05.27	Supports Appendix Release version N, P, P (rev.1). Adds eight kinds of devices. Fixes to Typo, etc. in the English version of Release P.

### Additional devices

The following eight device objects are additionally released this time.

EOJ	Device name
0x0007	Human detection sensor
0x0012	Humidity sensor
0x0016	Bath heating status sensor
0x001B	CO2 sensor
0x0281	Water flowmeter
0x0282	ガスメータ

EOJ	Device name
0x028D	Smart electric energy meter for sub-metering
0x02A3	Lighting system

## Modification of definitions

- Added the following items to definitions
  - number\_1-999
  - number\_1-999999
  - number\_0-999999999m3
  - state\_LightColor\_40-44FD
  - state\_NoData\_FFFE

## MRA Release note (V1.0.1)

2022.01.07

- Data version: 1.0.1
- Data format version: 1.0.0
- Appendix Release version: M

## Revision history

Data version	Date	Description
1.0.0	2021.11.17	Official release
1.0.1	2021.12.01	Bug fixes found in validation of the device description created from MRA v1.0.0

## Some modifications

File	EPC	変更内容
0x027A_mcrule.json	0xE7	Corrected the position of note description
0x027A_mcrule.json	0xE8	Corrected the position of note description
0x027B_mcrule.json	0xE7	Corrected the position of note description
0x027B_mcrule.json	0xE8	Corrected the position of note description
0x0280_mcrule.json	0xE0	Added description (*1)
0x0280_mcrule.json	0xE3	Added description (*1)
0x03B9_mcrule.json	0xE7	Corrected the description of oneOf so that the correct DD is generated.
0x0290.json	0xBB	shortName to lightColorForMainLighting

File	EPC	変更内容
0x027A.json	0xE7	note changed to remark
0x027A.json	0xE8	note changed to remark
0x0288.json	0xE5	ddefinitions / state DefaultValue FF (no change in content)
0x0602.json	0xB2	Fixed name in bitmaps to match Device Descriptions (*2)
definitions.json		Corrected the value of "format" of number_-999999999--1Wh (unit32->int32) (*3)

(\*1)

```
"note" : {
  "ja" : "EPC=0xE2の値を乗算済みの値",
  "en" : "The value is multiplied by the value of EPC=0xE2."
}
```

(\*2)

Before modification	After modification
ansiX34	ansiX34Equipped
shiftJis	shiftJisEquipped
jis	jisEquipped
japaneseEuc	japaneseEucEquipped
ucs4	ucs4Equipped
ucs2	ucs2Equipped
latin1	latin1Equipped
utf8	utf8Equipped

(\*3)

Before modification

```
"number_-999999999--1Wh": {
  "type": "number",
  "format": "uint32",
  "minimum": -999999999,
  "maximum": -1,
  "unit": "Wh"
},
```

After modification

```
"number_-999999999--1Wh": {  
  "type": "number",  
  "format": "int32",  
  "minimum": -999999999,  
  "maximum": -1,  
  "unit": "Wh"  
},
```

## MRA Release note (V1.0.0)

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2021.12.01

- Data version: 1.0.0
- Data format version: 1.0.0
- Appendix Release version: M

The MRA data for the APPENDIX Detailed Requirements for ECHONET Device objects is released in compliance with Guidebook of Machine Readable Appendix (MRA) V1.0.0.

The following 38 device objects are released this time.

<b>EOJ</b>	<b>Device name</b>
0x0011	Temperature sensor
0x0022	Electric energy sensor
0x0023	Current value sensor
0x0130	Home air conditioner
0x0133	Ventilation fan
0x0134	Air conditioner ventilation fan
0x0135	Air cleaner
0x0156	Package-type commercial air conditioner (indoor unit)(except those for facilities)
0x0157	Package-type commercial air conditioner (outdoor unit)(except those for facilities)
0x0263	Electrically operated rain sliding door/shutter
0x026B	Electric water heater
0x026F	Electric key
0x0272	Instantaneous water heater
0x0273	Bathroom heater & dryer

<b>EOJ</b>	<b>Device name</b>
0x0279	Household solar power generation
0x027A	Hot water heat source equipment
0x027B	Floor heater
0x027C	Fuel cell
0x027D	Storage battery
0x027E	EV charger & discharger
0x0280	Watt-hour meter
0x0287	Power distribution board
0x0288	Low-voltage smart electric energy meter
0x028A	High-voltage smart electric energy meter
0x0290	General lighting
0x0291	Mono functional lighting
0x02A1	EV charger
0x02A4	Extended lighting system
0x02A6	Hybrid water heater
0x03B7	Refrigerator
0x03B9	Cooking heater
0x03BB	Rice cooker
0x03CE	Commercial show case
0x03D3	Washer & dryer
0x03D4	Commercial show case outdoor unit
0x05FD	Switch
0x05FF	Controller
0x0602	Television

- The data corresponding to the device object super class is described in 0x0000.json.
- The data corresponding to the node profile (0x0EF0) is described in 0x0EF0.json. It contains the contents of the profile object super class.
- History information about specification changes is written based on the contents of APPENDIX Revision History M\_20211109.xls. For electrically operated rain sliding door/shutter (0x0263), fuel cell (0x027C), electric vehicle charger/discharger (0x027E), and low-voltage smart electric energy meter (0x0288), the historical information from Release D, C, D, and F, respectively, is described in consideration of the revisions made for each release.

- The files in the folder MCRules are used to generate Device Descriptions for the ECHONET Lite Web API.