

## MFR-RU Series Datasheet

### 1. Specifications

#### MFR-16RU/16RUD Basic specifications

Temperature / Humidity	0°C to 40°C / 30% to 85% (no condensation)	
Power	+12 V DC Pin-connector x 1	
Consumption	MFR-16RU: 100 V AC to 120 V AC: 7VA (3W), 220 V AC to 240 V AC: 11VA (4W) MFR-16RUD: 100 V AC to 120 V AC: 8VA (3W), 220 V AC to 240 V AC: 11VA (4W)	
Dimensions	430 (W) x 44 (H) x 34 (D) mm EIA1RU 480 (W) (Including rack mount brackets)	
Weight	1kg	

#### MFR-16RU/16RUD Technical specifications

Buttons/Color	16 buttons (1 color: Green), user assignable Menu Display (Max. 16 characters x 2 lines) (MFR-16RUD only)	
Number of Connection	Max. 128 (including Main, MFR-RU Series, MFR-GPI and MFR-TALM units)	
Interface	MFR-LAN	10/100BASE-TX RJ-45 x 1 (For connection to MU. A network switch required for multiple unit configuration.)

#### MFR-16RU/16RUD Accessories

AC cord, AC adaptor, DC cable retaining clip, EIA rack mount brackets, Tool used to change button labels, and LAN cable (straight)

#### MFR-40RU Basic specifications

Temperature / Humidity	0°C to 40°C / 30% to 85% (no condensation)	
Power	+12 VDC Pin-connector x 2 (redundant power supply as standard)	
Consumption	100 V AC to 120 V AC: 10VA (5W), 220 V AC to 240 V AC: 15VA (7W)	
Dimensions	430 (W) x 44 (H) x 42 (D) mm EIA1RU 480 (W) (Including rack mount brackets)	
Weight	2kg	

#### MFR-40RU Technical specifications

Buttons/Color	40 buttons (3 colors: Red/Green/Orange), user assignable	
Number of Connection	Max. 128 (including Main, MFR-RU Series, MFR-GPI and MFR-TALM units)	
Interface	MFR-LAN	10/100BASE-TX RJ-45 x 1 (For connection to MU. A network switch required for multiple unit configuration.)
	SERVICE	RS-232C 9-pin D-sub (male) x 1 (for maintenance)

#### MFR-40RU Accessories

AC cord, AC adaptor, EIA rack mount brackets, Tool used to change button labels, and LAN cable (straight)

#### MFR-16RUW Basic specifications

Temperature / Humidity	0°C to 40°C / 30% to 85% (no condensation)
Power	+12 V DC Pin-connector x 1
Consumption	100 V AC to 120 V AC: 8VA (3W), 220 V AC to 240 V AC: 11VA (3W)
Dimensions	480 (W) x 44(H) x 27 (D) mm EIA1RU (Including rack mount brackets)
Weight	1kg

#### MFR-16RUW Technical specifications

Buttons/Color	18 buttons (1 color: Green), user assignable	
Number of Connection	Max. 128 (including Main, MFR-RU Series, MFR-GPI and MFR-TALM units)	
Interface	MFR-LAN	10/100BASE-TX RJ-45 x 1 (For connection to MU. A network switch required for multiple unit configuration.)

#### MFR-16RUW Accessories

AC cord, AC adaptor, DC cable retaining clip, and Tool used to change button labels

#### MFR-32RUW Basic specifications

Temperature / Humidity	0°C to 40°C / 30% to 85% (no condensation)
Power	+12 V DC Pin-connector x 1
Consumption	100 V AC to 120 V AC: 10VA (4W), 220 V AC to 240 V AC: 13VA (4W)
Dimensions	480 (W) x 44 (H) x 27 (D) mm EIA1RU (Including rack mount brackets)
Weight	1kg

#### MFR-32RUW Technical specifications

Buttons/Color	34 buttons (1 color: Green), user assignable	
Number of Connection	Max. 128 (including Main, MFR-RU Series, MFR-GPI and MFR-TALM units)	
Interface	MFR-LAN	10/100BASE-TX RJ-45 x 1 (For connection to MU. A network switch required for multiple unit configuration.)

#### MFR-32RUW Accessories

AC cord, AC adaptor, DC cable retaining clip, and Tool used to change button labels

### MFR-64RUW Basic specifications

Temperature / Humidity	0°C to 40°C / 30% to 85% (no condensation)
Power	+12 V DC Pin-connector x 1
Consumption	100 V AC to 120 V AC: 15VA (7W), 220 V AC to 240 V AC: 20VA (8W)
Dimensions	480 (W) x 88 (H) x 27 (D) mm EIA2RU (Including rack mount brackets)
Weight	1.5 kg

### MFR-64RUW Technical specifications

Buttons/Color	68 buttons (1 color: Green), user assignable	
Number of Connection	Max. 128 (including Main, MFR-RU Series, MFR-GPI and MFR-TALM units)	
Interface	MFR-LAN	10/100BASE-TX RJ-45 x 1 (For connection to MU. A network switch required for multiple unit configuration.)

### MFR-64RUW Accessories

AC cord, AC adaptor, DC cable retaining clip, and Tool used to change button labels

### MFR-18RU Basic specifications

Temperature / Humidity	0°C to 40°C / 30% to 85% (no condensation)
Power	+12 VDC Pin-connector x 2 (redundant power supply as standard)
Consumption	100 V AC to 120 V AC: 12VA (6W), 220 V AC to 240 V AC: 18VA (8W)
Dimensions	430 (W) x 44 (H) x 42 (D) mm EIA1RU 480 (W) (Including rack mount brackets)
Weight	2kg

### MFR-18RU Technical specifications

Buttons/Color	18 buttons (3 colors: Red/Green/Orange), user assignable LCD display x 18 (Max. 7 characters x 2 lines, 7-color, Displayed above each button) with Rotary selector	
Number of Connection	Max. 128 (including Main, MFR-RU Series, MFR-GPI and MFR-TALM units)	
Interface	MFR-LAN	10/100BASE-TX RJ-45 x 1 (For connection to MU. A network switch required for multiple unit configuration.)
	SERVICE	RS-232C 9-pin D-sub (male) x 1 (for maintenance)

### MFR-18RU Accessories

AC cord, AC adaptor, DC cable retaining clip, EIA rack mount brackets, Tool used to change button labels, and LAN cable (straight)

### MFR-18RUA Basic specifications

Temperature / Humidity	0°C to 40°C / 30% to 85% (no condensation)
Power	+12 VDC Pin-connector x 2 (redundant power supply as standard)
Consumption	100 V AC to 120 V AC: 14VA (6W), 220 V AC to 240 V AC: 18VA (6W)
Dimensions	430 (W) x 44 (H) x 42 (D) mm EIA1RU 480 (W) (Including rack mount brackets)
Weight	2kg

### MFR-18RUA Technical specifications

Buttons/Color	18 buttons (3 colors: Red/Green/Orange), user assignable OLED display x 18 (Max. 7 characters x 2 lines, 7-color, Displayed above each button) with Rotary selector	
Number of Connection	Max. 128 (including Main, MFR-RU Series, MFR-GPI and MFR-TALM units)	
Interface	MFR-LAN	10/100BASE-TX RJ-45 x 1 (For connection to MU. A network switch required for multiple unit configuration.)
	SERVICE	RS-232C 9-pin D-sub (male) x 1 (for maintenance)

### MFR-18RUA Accessories

AC cord, AC adaptor, EIA rack mount brackets, Tool used to change button labels, and LAN cable (straight)

### MFR-39RU Basic specifications

Temperature / Humidity	0°C to 40°C / 30% to 85% (no condensation)
Power	+12 VDC Pin-connector x 2 (redundant power supply as standard)
Consumption	100 V AC to 120 V AC: 17VA (9W), 220 V AC to 240 V AC: 22VA (11W)
Dimensions	430 (W) x 88 (H) x 44 (D) mm EIA2RU 480 (W) (Including rack mount brackets)
Weight	3kg

### MFR-39RU Technical specifications

Buttons/Color	39 buttons (LCD buttons, 7-color) Displayed in each button (Max. 7 characters x 2 lines) 10 buttons (3 colors: Red/Green/Orange), user assignable Menu display x 1 (Max. 23 characters x 2 lines) with Rotary selector	
Number of Connection	Max. 128 (including Main, MFR-RU Series, MFR-GPI and MFR-TALM units)	
Interface	MFR-LAN	10/100BASE-TX RJ-45 x 1 (For connection to MU. A network switch required for multiple unit configuration.)
	SERVICE	RS-232C 9-pin D-sub (male) x 1 (for maintenance)

### MFR-39RU Accessories

AC cord, AC adaptor, DC cable retaining clip, EIA rack mount brackets, Tool used to change button labels, and LAN cable (straight)

### MFR-39RUA Basic specifications

Temperature / Humidity	0°C to 40°C / 30% to 85% (no condensation)
Power	+12 VDC Pin-connector x 2 (redundant power supply as standard)
Consumption	100 V AC to 120 V AC: 19VA (9W), 220 V AC to 240 V AC: 24VA (9W)
Dimensions	430 (W) x 88 (H) x 42 (D) mm EIA2RU 480 (W) (Including rack mount brackets)
Weight	3kg

### MFR-39RUA Technical specifications

Buttons/Color	39 buttons (OLED buttons, 7-color) Displayed in each button (Max. 7 characters x 2 lines) 6 buttons (3 colors: Red/Green/Orange), user assignable Current DEST button, current SRC button, current PAGE display x 2, Rotary selector	
Number of Connection	Max. 128 (including Main, MFR-RU Series, MFR-GPI and MFR-TALM units)	
Interface	MFR-LAN	10/100BASE-TX RJ-45 x 1 (For connection to MU. A network switch required for multiple unit configuration.)
	SERVICE	RS-232C 9-pin D-sub (male) x 1 (for maintenance)

### MFR-39RUA Accessories

AC cord, AC adaptor, EIA rack mount brackets, Tool used to change button labels, and LAN cable (straight)

### MFR-16RUTA Basic specifications

Temperature / Humidity	0°C to 40°C / 30% to 85% (no condensation)
Power	+12 V DC Pin-connector x 1
Consumption	100 V AC to 120 V AC: 12VA (5W), 220 V AC to 240 V AC: 15VA (6W)
Dimensions	215(W) x 88(H) x 43(D) mm EIA 2 RU, half-rack size
Weight	1kg

### MFR-16RUTA Technical specifications

Buttons/Color	16 buttons (3 colors: Red/Green/Orange), user assignable OLED display x 16 (Max. 7 characters x 2 lines, 7-color, Displayed above each button) 2 buttons for PAGE control (lit orange) 1 button for LOCK control (lit orange) Rotary selector	
Number of Connection	Max. 128 (including Main, MFR-RU Series, MFR-GPI and MFR-TALM units)	
Interface	MFR-LAN	10/100BASE-TX RJ-45 x 1 (For connection to MU. A network switch required for multiple unit configuration.)

### MFR-16RUTA Accessories

AC cord, AC adaptor, Tool used to change button labels, and LAN cable (straight)

### MFR-8RUA Basic specifications

Temperature / Humidity	0°C to 40°C / 30% to 85% (no condensation)
Power	+12 VDC Pin-connector x 2 (redundant power supply as standard)
Consumption	100 V AC to 120 V AC: 9VA (3W), 220 V AC to 240 V AC: 11VA (3W)
Dimensions	212(W) x 44(H) x 42(D) mm EIA 1 RU, half-rack size 480 (W) (Including rack mount brackets)
Weight	1kg

### MFR-8RUA Technical specifications

Buttons/Color	8 buttons (3 colors: Red/Green/Orange), user assignable OLED display x 8 (Max. 7 characters x 2 lines, 7-color, Displayed above each button) with Rotary selector	
Number of Connection	Max. 128 (including Main, MFR-RU Series, MFR-GPI and MFR-TALM units)	
Interface	MFR-LAN	10/100BASE-TX RJ-45 x 1 (For connection to MU. A network switch required for multiple unit configuration.)
	SERVICE	RS-232C 9-pin D-sub (male) x 1 (for maintenance)

### MFR-8RUA Options

EIA Rack Mount Brackets	Single- or Dual-unit type
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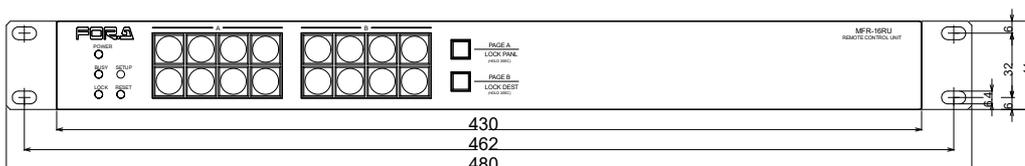
### MFR-8RUA Accessories

AC cord, AC adaptor, Tool used to change button labels, and LAN cable (straight)

## 2. External Dimensions

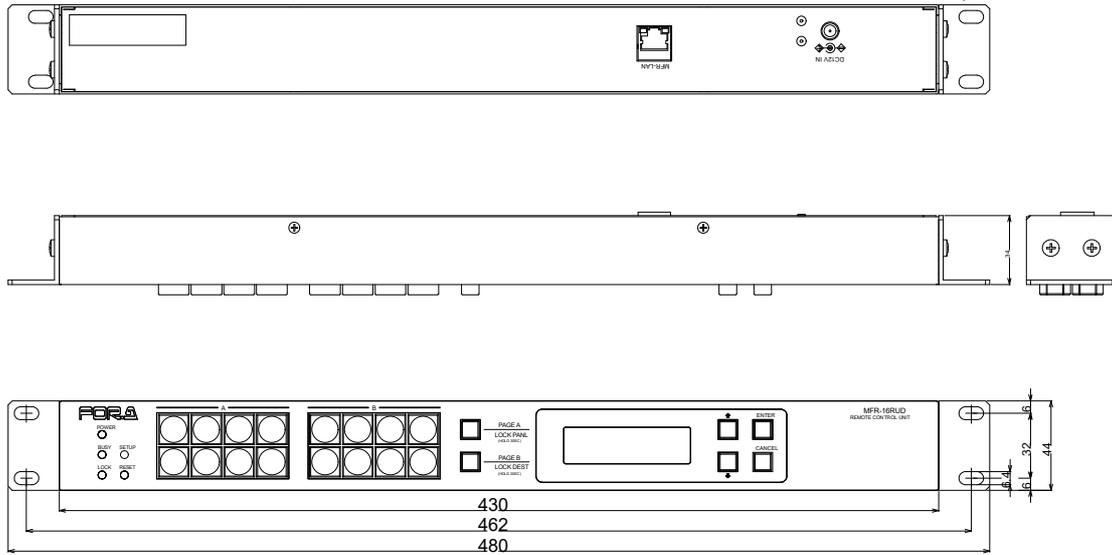
### MFR-16RU

(All dimensions in mm.)



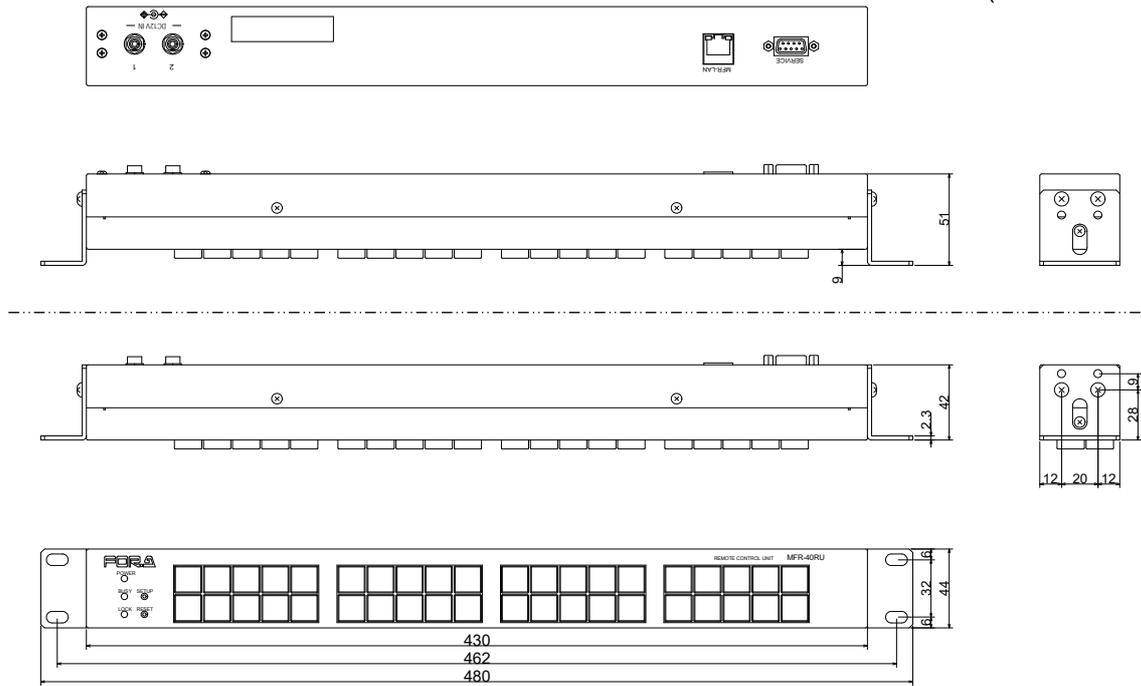
**MFR-16RUD**

(All dimensions in mm.)



**MFR-40RU**

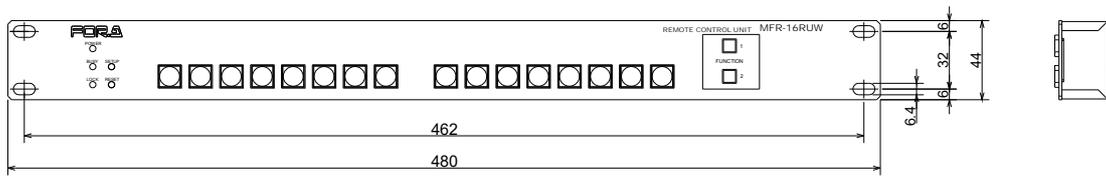
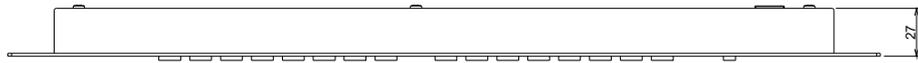
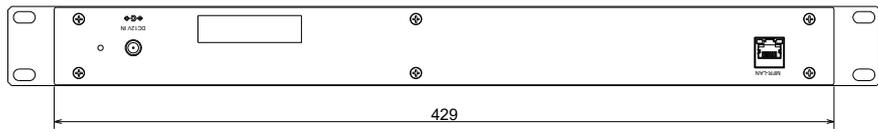
(All dimensions in mm.)



\* The panel buttons can be fitted within the rack by sliding the rack ears forward to attach as shown in the bottom figure above.

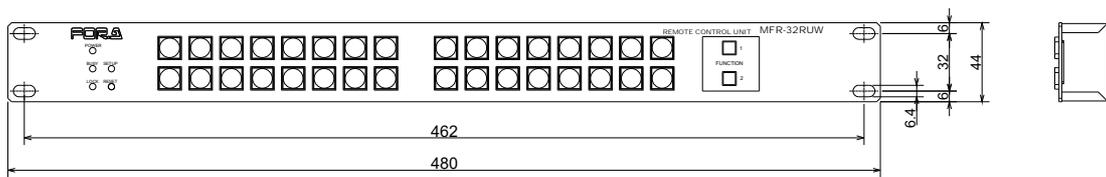
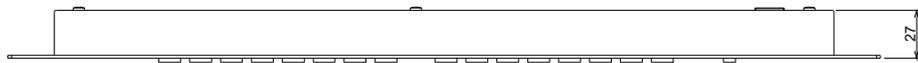
**MFR-16RUW**

(All dimensions in mm.)



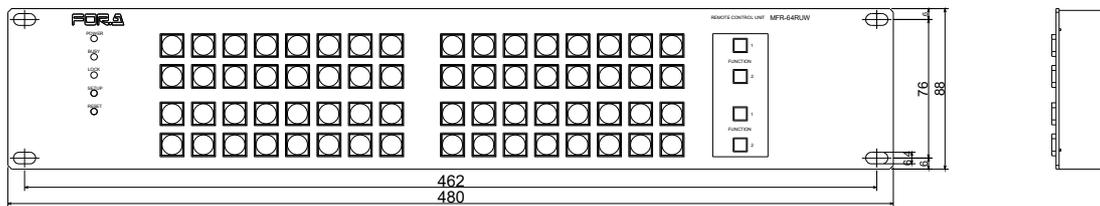
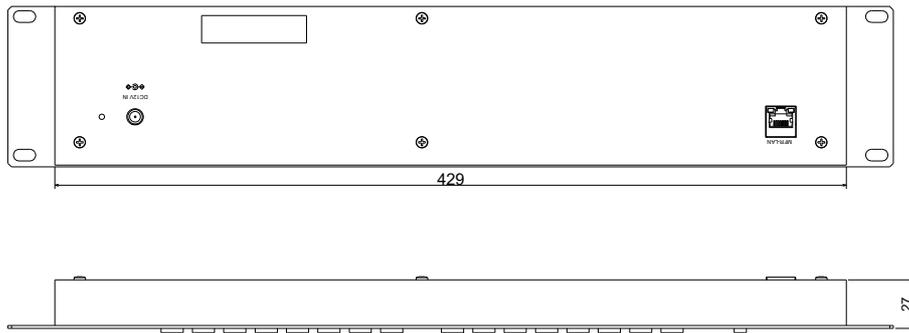
**MFR-32RUW**

(All dimensions in mm.)



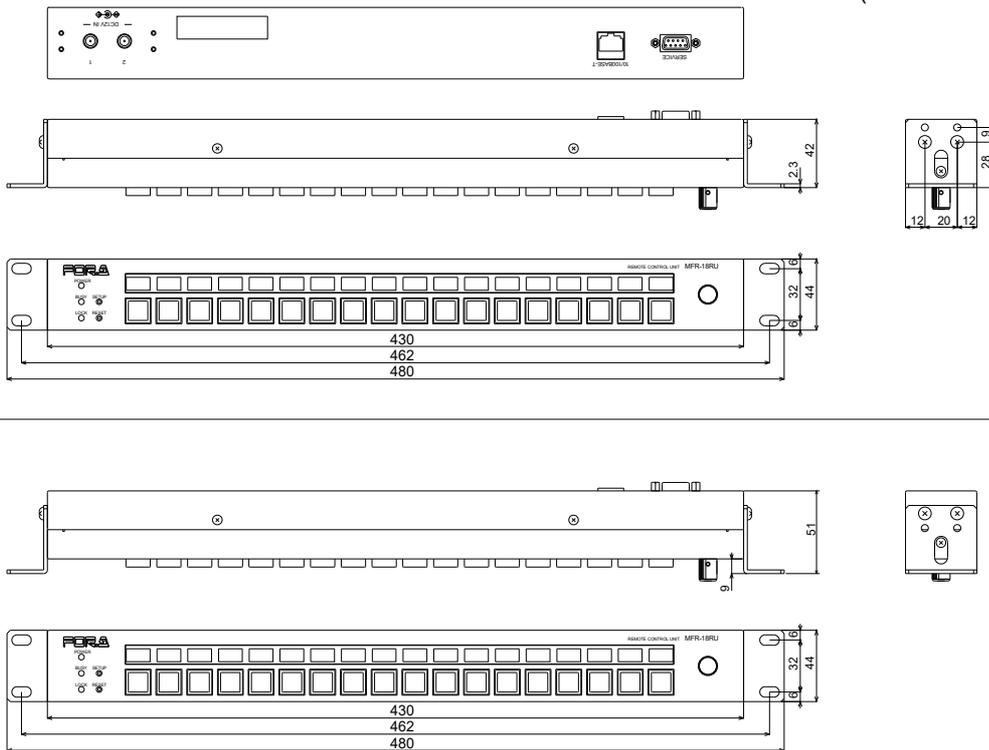
**MFR-64RUW**

(All dimensions in mm.)



**MFR-18RU**

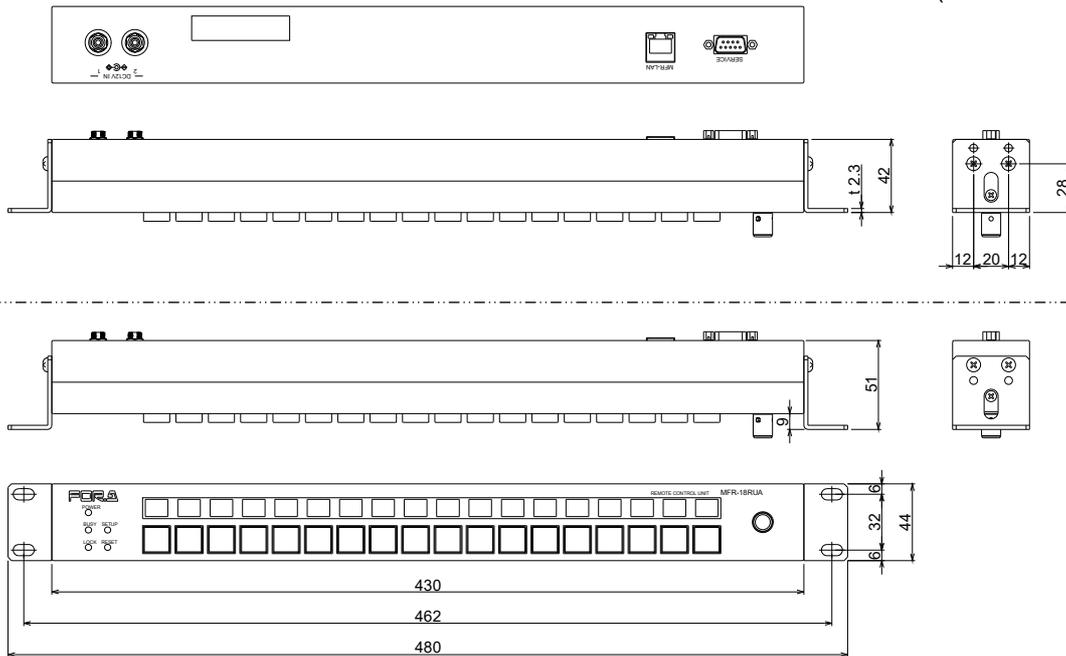
(All dimensions in mm.)



\* The panel buttons can be fitted within the rack by sliding the rack ears forward to attach as shown in the bottom figure above.

**MFR-18RUA**

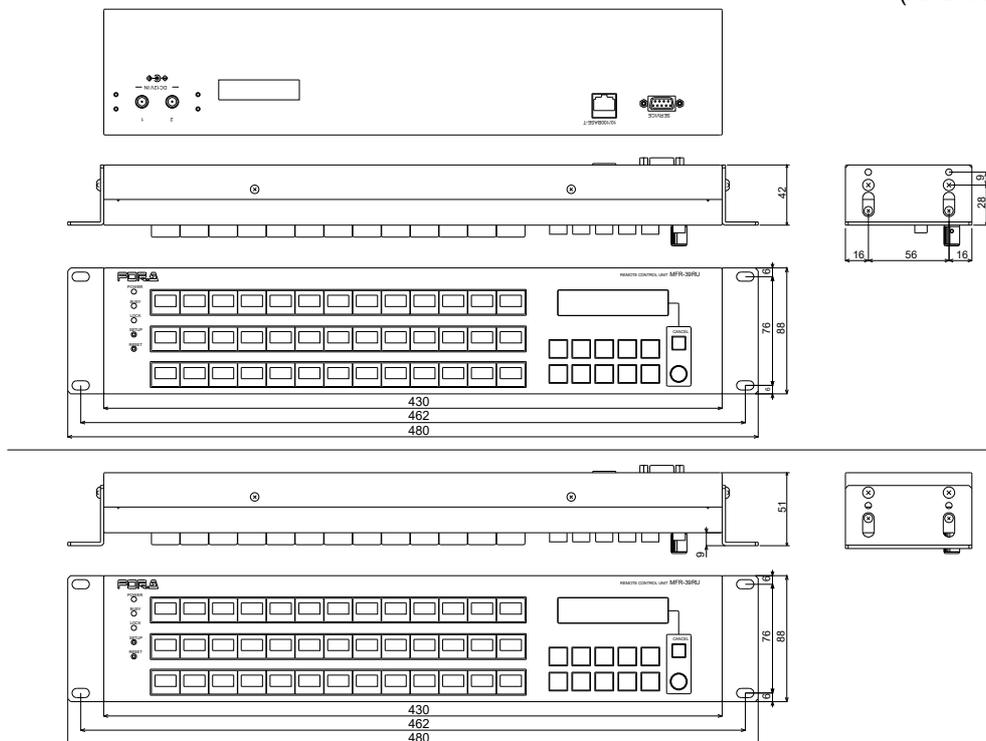
(All dimensions in mm.)



\* The panel buttons can be fitted within the rack by sliding the rack ears forward to attach as shown in the bottom figure above.

**MFR-39RU**

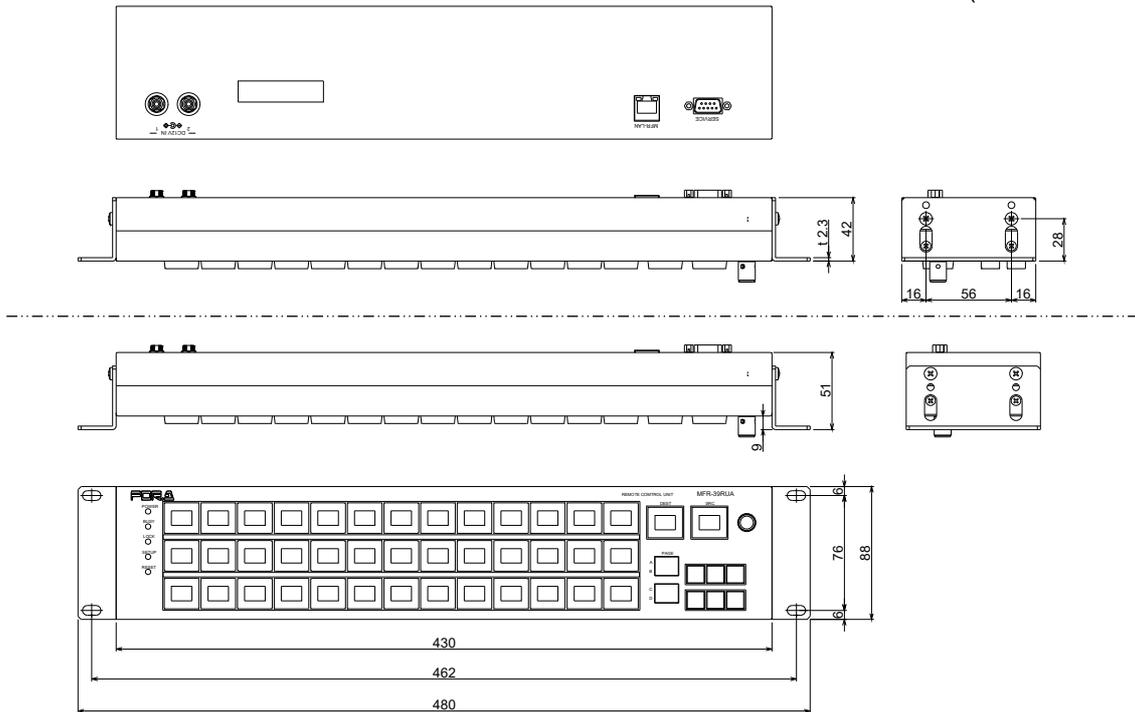
(All dimensions in mm.)



\* The panel buttons can be fitted within the rack by sliding the rack ears forward to attach as shown in the bottom figure above.

**MFR-39RUA**

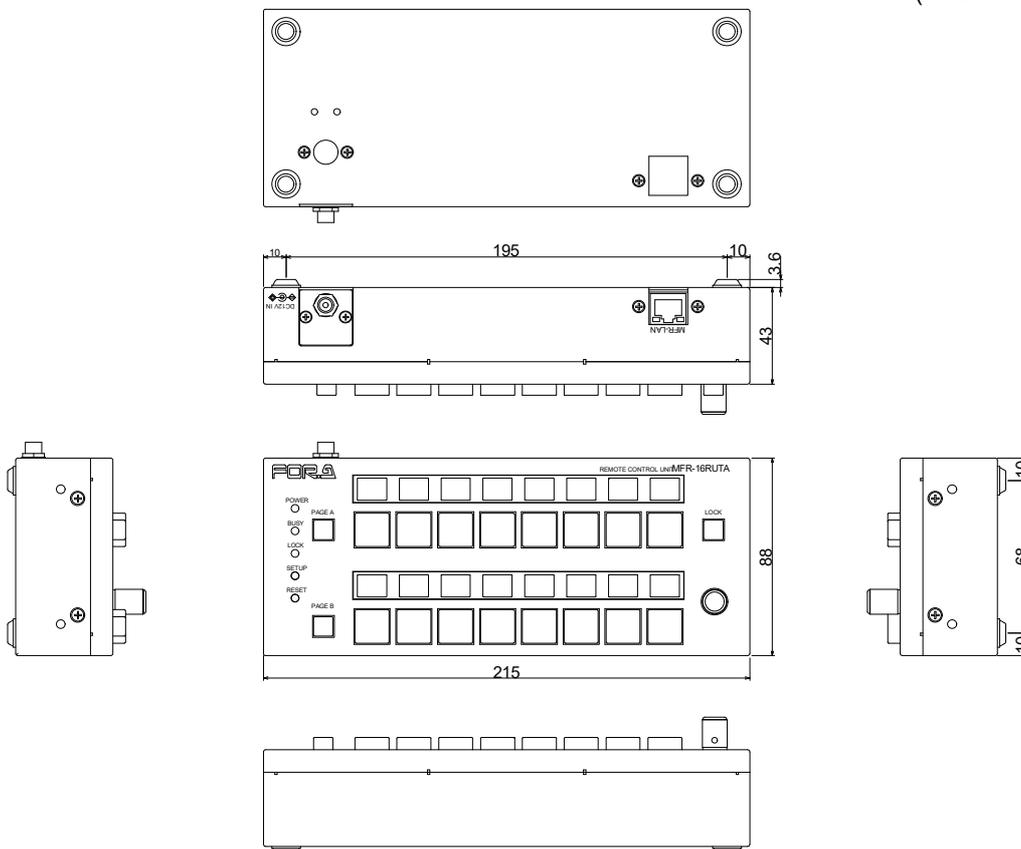
(All dimensions in mm.)



\* The panel buttons can be fitted within the rack by sliding the rack ears forward to attach as shown in the bottom figure above.

**MFR-16RUTA**

(All dimensions in mm.)



**MFR-8RUA**

(All dimensions in mm.)

