

## MFR-4100 Datasheet

### 1. Specifications

#### Basic specifications

Temperature / Humidity	0°C to 40°C / 30% to 85% (no condensation)
Power	100 VAC to 240 VAC $\pm$ 10%, 50/60Hz IN
Consumption	SDI 72 x 72, Dual CPU/Redundant Power Unit (Maximum Configuration) 100 V AC to 120 V AC: 900 VA (891 W) 220 V AC to 240 V AC: 946 VA (841 W)
Dimensions	430 (W) x 310 (H) x 400 (D) mm EIA 7RU 480 (W) (Including rack mount brackets)
Weight	50.0 kg (Including all options)
Consumables	Power supply unit: Replace every 5 years. FAN1-3 (P-1651): Replace every 4 years. FAN4-5 (P-1650): Replace every 4 years.

#### Technical specifications

Video format	
UHD 4K (12G-SDI)	2160/59.94p, 50p (SMPTE ST 2082-1)
(6G-SDI)	2160/30p, 29.97p, 25p, 24p, 23.98p (SMPTE ST 2081-1)
HD (3G-SDI)	1080/60p, 59.94p, 50p (SMPTE424M)
HD (HD-SDI)	1080/60i, 59.94i, 50i, 30p, 30PsF, 29.97p, 29.97PsF, 23.98p, 23.98PsF, 25p, 25PsF, 24PsF, 24p, 720/60p, 59.94p, 50p (SMPTE292M)
SD (SD-SDI)	525/59.94i, 625/50i (SMPTE259M)
Matrix Size	Min. 9 x 9 to Max. 72 x 72 (Expandable on a 9-channel basis) Number of input slots: 8 Number of output slots: 8
Video input	
MFR-9SDI12GA	12G/6G/3G/HD/SD-SDI Input Card (8 cards Max.) 75-ohm BNC x 9
MFR-9SDI	6G/3G/HD/SD-SDI Input Card (8 cards Max.) 75-ohm BNC x 9
Video output	
MFR-9SDO12GA	12G/6G/3G/HD/SD-SDI Output Card (8 cards Max.) 75-ohm BNC x 9 (Auto reclocking)
MFR-9SDO	6G/3G/HD/SD-SDI Output Card (8 cards Max.) 75-ohm BNC x 9 (Auto reclocking)

Process Delay	<p>When MFR-9SDI12GA and MFR-9SDO12GA cards are installed.</p> <p>12G-SDI: Less than 1.0 <math>\mu</math>s          6G-SDI: Less than 1.0 <math>\mu</math>s          3G-SDI: Less than 1.0 <math>\mu</math>s          HD-SDI: Less than 1.5 <math>\mu</math>s          SD-SDI: Less than 3.0 <math>\mu</math>s</p> <p>When MFR-9SDI and MFR-9SDO12GA cards are installed.          When MFR-9SDI12GA and MFR-9SDO cards are installed.</p> <p>6G-SDI: Less than 0.5 <math>\mu</math>s          3G-SDI: Less than 0.5 <math>\mu</math>s          HD-SDI: Less than 0.8 <math>\mu</math>s          SD-SDI: Less than 1.5 <math>\mu</math>s</p>
Reference Input	BB: NTSC: 0.429Vp-p/PAL: 0.45Vp-p or Tri-level Sync: 0.6V(p-p) 75-ohm BNC x 2, loop-through (Terminate with 75-ohm terminator, if unused.)
Interfaces	
MFR-LAN	10/100 BASE-TX, RJ-45 x 2 (For connecting up to 128 RU/GPI units.) (Second LAN port used in redundant CPU configuration)
PC-LAN	10/100/1000 BASE-T, RJ-45 x 2 (for PC operation) (Second LAN port used in redundant CPU configuration)
SERIAL	RS-232C/RS-422 (Selectable), 9-pin D-sub (male) x 1
ALARM	9-pin D-sub 9 (female) x1 (Output: Power, Fan Alarm, Crosspoint Error, CPU changeover, Secondary CPU Error, MTX Alarm)

### Options

MFR-41CPU	Redundant CPU card
MFR-41PS	Redundant power supply unit (AC cord retainer clip included.)
MFR-18RUA/39RUA/8RUA MFR-39RU/40RU/18RU MFR-16RU/16RUD/16RUTA MFR-16/32/64RUW	Remote Control Unit

### Accessories

AC cord, CD-ROM, and Quick setup guide

**2. External Dimensions**

(All dimensions in mm.)

