

## MFR-1000 Datasheet

### 1. Specifications

#### Basic specifications

Temperature	0°C to 40°C
Humidity	30% to 90% (no condensation)
Power	100V AC to 240V AC $\pm$ 10%, 50/60Hz
Consumption	100V AC to 120V AC: 90 VA (88 W) 220V AC to 240V AC: 107 VA (86 W)
Dimensions	430 (W) x 44 (H) x 325 (D)mm EIA 1RU 480 (W) (Including rack mount brackets)
Weight	6 kg
Consumables (at 24-hour operation)	Fan 1 (P-1630): Replace every 4 years. Fan 2 (P-1631): Replace every 4 years. Fan 3 (P-1632): Replace every 4 years. Fan 4 (P-1633): Replace every 4 years. Power supply unit: Replace every 5 years.

#### Technical specifications

Video Formats	
UHD 4K (12G-SDI)	2160/60p, 59.94p, 50p (SMPTE ST 2082-10)
HD (3G-SDI)	1080p/ 60, 59.94, 50 (SMPTE424M)
HD (HD-SDI)	1080i/ 60, 59.94, 50, 1080p/ 30, 29.97, 25, 24, 23.98 1080PsF/ 30, 29.97, 25, 24, 23.98 720p/ 60, 59.94, 50 (SMPTE292M)
SD (SD-SDI)	525/59.94i, 625/50i (SMPTE259M)
DVB-ASI	Compliant to EN 50083-9
Input/Output Matrix	Standard: 8 $\times$ 8, Max.:16 $\times$ 16
Video Input	
MFR-8SDI12G (Option)	12G/3G/HD/SD-SDI Input Card - 75 $\Omega$ BNC x 8  Cable Equalization - 12G-SDI: 70m (L-5.5CUHD cable) - 3G/HD-SDI: 100m (5C-FB cable) - SD-SDI: 200m (5C-2V cable)
Video Output	
MFR-8SDO12G (Option)	12G/3G/HD/SD-SDI Output Card - 75 $\Omega$ BNC x 8 (Auto reclocking)

AVDL Function	
MFR-8AVDL12G (Option)	AVDL function card  Output alignment -+1H~5H against the reference input signal. Adjustment range -Variable depending on output adjustment range +1H Output: -4.1H to +0.9H +2H Output: -3.1H to +1.9H +3H Output: -2.1H to +2.9H +4H Output: -1.1H to +3.9H +5H Output: -0.1H to +4.9H
Ancillary Data Packet	-Quiet Switch: OFF All ancillary data in input signal is passed through. (No compensation on signal switching noise.) -Quiet Switch: ON – Ancillary data as listed below are embedded by reproduction. -SMPTE ST352 (Video payload ID) -SMPTE ST299-1 (Embedded audio) 16 channels (Group1 to 4) PCM, 48kHz 24bit synchronous only (For 12G-SDI, Group1-4 in Stream 1 passed through)
Reference Input	BB: NTSC: 0.429Vp-p / PAL: 0.45Vp-p or Tri-level Sync: 0.6 Vp-p 75Ω BNC x 1, loop-through (Terminate with a 75Ω terminator if unused.)
Interfaces	
MFR-LAN	10/100BASE-TX RJ-45 x 1 (For connecting up to 128 RU/GPI units.)
PC-LAN	10/100BASE-TX, RJ-45 x 1 (for PC operation/ External connection)
GPI IN/TALLY OUT	25 pin D-sub (female) x 1

### Options

MFR-8SDI12G	8 SDI-input card
MFR-8SDO12G	8 SDI-output card
MFR-8AVDL12G	AVDL function card
MFR-10PS	Redundant power supply unit (with AC cord and AC cord clamp.)
MFR-8RUA/18RUA/39RUA/40RU MFR-16RU/16RUD/16RUTA MFR-16RUW/32RUW/64RUW	Remote Control Unit
MFR-GPI	Interface Expansion Unit
MFR-TALM	Tally Manager Unit

### Accessories

AC cord, Rubber feet, and Quick setup guide

**2. External Dimensions**

(All dimensions in mm.)

