

USF-106UDC/106DC-12G Datasheet

1. Specifications

Basic specifications

Temperature	0°C to 40°C
Humidity	30% to 90% (no condensation)
Power	DC +12 V supplied from USF frame
Consumption	2.5 A
Dimensions	Front module 106 (W) x 357 (D) mm Rear module 114 (W) x 40.7 (H) mm
Weight	0.4 kg
Required Slot	2 Slots

Technical specifications

Video format	59 Hz signals 3840 x 2160/59.94p (Quad Link 3G-SDI, SQD/2SI, Level-A/B) 3840 x 2160/59.94p (Single Link 12G-SDI) 1080/59.94p Level-A/B, 59.94i (29.97PsF), 29.97p, 23.98p, 23.98PsF 720/59.94p 525/59.94i 50 Hz signals 3840 x 2160/50p (Quad Link 3G-SDI, SQD/2SI, Level-A/B) 3840 x 2160/50p (Single Link 12G-SDI) 1080 / 50p Level-A/B, 50i (25PsF), 25p 720/50p 625/50i
Video input	12G/3G/HD/SD-SDI 75Ω BNC x 1 (SDI 1) 3G/HD/SD-SDI 75Ω BNC x 4 (SDI 2a-2d) (Input or output)
Video output	12G/3G/HD/SD-SDI 75Ω BNC x 2 (SDI 1a, 1b) 3G/HD/SD-SDI 75Ω BNC x 4 (SDI 2a-2d) (Input or output)
Color sampling	4:2:2 10-bit
Genlock input	BB: NTSC: 0.429 V (p-p) / PAL: 0.45 V (p-p) Tri-level-sync: 0.6 V (p-p) 75Ω or loop-through
Sync mode	Frame, Line, AVDL, Line (Min.)
System Phase Adjustment	
Frame mode	Horizontal :-0.5 H to +0.5 H Vertical: -0.5 frame to +0.5 frame Delay: Max. 1 frame + 2 H / Min. 2 H (Max: 1 frame + 4 H / Min. 4 H for Quad Link 3G-SDI)
Line mode	Horizontal: -0.5 H to +0.5 H Vertical: -0.5 frame to +0.5 frame Delay: Max. 1.45 H / Min. 0.55H
AVDL mode	Horizontal: -0.5 H to +0.5 H Vertical: -0.5 frame to +0.5 frame Delay: 4K/HD: Max. 5.5 H / Min. 0.5 H SD Max. 1.5 H / Min. 0.5 H

Line(Min) mode	Horizontal: -0.5 H to +0.5 H Vertical: -0.5 frame to +0.5 frame Delay: Max. 1H + 600 clk / Min. 800 clk
Video Delay Adjustment	Max. 8 frames (in Frame or Input Sync mode)
Converter	I-P conversion, Up- / Down- / Cross-conversion, Aspect ratio conversion, Resizing, Positioning, 3G-SDI Level A / B conversion, 4K 2SI / SQD conversion * USF-106UDC-12G only: Up-conversion and 4K 2SI / SQD
Color Processor	Proc Amp, Color Space conversion, EOTF (De-gamma) / OETF (Gamma), Color Corrector, Video Clip
Proc Amp	Video Level: 0.0% to 200.0% Chroma Level: 0.0% to 200.0% Black Level: -20.0% to 100.0% Hue: -179.8° to +180°
Color Correction	Balance mode Differential mode
Video Clip	Knee Clip (RGB), YCbCr Clip
Color Gamut	ITU-R BT.709 / 2020, User defined-color space (uploadable)
EOTF/OETF	HLG, SMPTE 2048, ITU-R BT.1886, User defined-gamma (uploadable)
Audio input	12G/6G/3G/HD-SDI: 16 channels (Group 1-4) 48 kHz 16 to 24-bit synchronous / asynchronous audio SD-SDI: 16 channels (Group 1-4) 48 kHz 16 to 24-bit synchronous audio
Audio output	12G/6G/3G/HD-SDI: 16 channels (Group 1-4) 48 kHz 16/20/24-bit synchronous / asynchronous audio SD-SDI: 12 channels (Group 1-3) 48 kHz 16/20/24-bit synchronous audio
Audio delay line	1 ms to 1,000 ms (1 ms increments)
Audio processor	SRC (Sample Rate Converter), Gain control, Downmix, Output assign, Mute (for each channel)
SNMP	Supports version v2c

Software Option

USF-10UDC-AHDR2 or USF-10DC-AHDR2	HDR Expansion option
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Remote Control Option

FA-10RU	Remote Control Unit
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Accessories

Screws for rear module installation and DVD-ROM

2. External Dimensions

(All dimensions in mm.)

