

## FT-ONE-LS Datasheet

### 1. Specifications

#### <Camera Head> Basic specifications

Temperature	0°C to 40°C
Humidity	30% to 85% (no condensation)
Power	Supplied from the base station, via optical camera cable or an external power supply: 100 V to 240 V AC (Max. 1 km) DC IN: EEG.2T.302.CLL (Lemo connector) x 1, DC+12 to +17V DC OUT: EEG.2T.303.CLL (Lemo connector) x 1, DC+12 to +17V (Max. 20 W)
Consumption	74 W
Dimensions	153 (W) x 148(H) x 336 (D) mm (excluding projecting parts)
Weight	7.1 kg
Consumables (at 24-hour operation)	Cooling fan (P-1552-1): Replace every 4 years (at normal temperature)

#### Technical specifications

Image sensor, shutter, other	
Sensor	CMOS sensor
Effective resolution	4096 x 2160
Sensor size	Super 35 mm-equivalent
Color filter	RGB Bayer
Shutter mechanism	Global shutter
Quantization	12-bit x RGB
Shutter speed	1/frame rate to 1/50,000 sec. (Preset stops)
Frame rate	4K High Speed mode: Max. 500 fps HD High Speed mode: Max. 1,200 fps 4K 2x Speed mode: 100 fps / 120 fps (depending on system frequency) HD 3x Speed mode: 150 fps / 180 fps (depending on system frequency) HD 6x Speed mode: 300 fps / 360 fps (depending on system frequency)
Lens mount	PL mount
Trigger method	Arbitrary positions from START, 10%-45%, CENTER, 55%-90%, END Pre-roll function: Adjustable playback position on FT-1RUA/RUB
Trigger signal input	From Remote Control Unit (FT-1RUA/RUB), GPI or camera button.
Video settings	
Gain	Digital: 0 - 42 dB (0.1 dB increments) Analog: 0 dB, 6 dB, 12 dB
White balance	PRESET: 3200K, 5600K, 6500K, 9300K Semiautomatic correction
Pedestal	Black level set via R, G, B, Master

Color correction	Linear matrix: Phase R-G, R-B, G-R, G-B, B-R, and B-G Hue and Saturation adjustments on 24-axis	
Gamma	Linear( $\gamma=1.0$ ), $\gamma=0.45$ , $\gamma=0.50$ , HDTV, CINEMA, LOG	
Knee	Knee point and Knee slope setting	
Enhancement	On/Off, horizontal (H), vertical (V)	
Chroma gain	Pb, Pr	
Audio inputs		
MIC IN	EEG.0T.305.CLL x 1 (1 stereo pair), balance, high impedance Input level: -60 dBu / -50 dBu / -40 dBu Phantom power supply: +48 V / OFF	
Audio output		
Embedded	2 channels (1 stereo pair), 48 kHz, synchronous	
Camera mode		
4K mode	4K High Speed mode 4K 2x Speed mode	
HD mode	HD High Speed mode HD 3x Speed mode HD 6x Speed mode	
Video outputs		
4K OUT 1-4	75 $\Omega$ DIN 1.0/2.3 x 4 Live video	
	4K High Speed mode:	x1 (3840 x 2160p) / 59.94, 50 (4:2:2) 3G-SDI x 4, SQD (Level-A/B, SQD)
	HD High Speed mode:	x4 (1920 x 1080p) / 59.94, 50
VF OUT	(1920 x 1080i) / 59.94, 50 75 $\Omega$ DIN 1.0/2.3 x 1	
	4K High Speed mode:	4K-downconverted live, slow or RET1/RET2 input video
	4K 2x Speed mode:	4K-downconverted live, or RET1/RET2 input video
	HD High Speed mode:	Live, slow or RET1/RET2 input video
	HD 3x Speed HD 6x Speed modes:	Live or RET1/RET2 input video
External Interfaces		
GPI	EEG.0T.309.CLL (Lemo connector) x 1 GPI IN1-6, R TALLY OUT, G TALLY OUT	
Iris control	EEG.2T.312.CLL (Lemo connector) x 1 Manual / Auto	
Intercom headset	EEG.0T.304.CLL (Lemo connector) x 1 PRIV / LINE (producer line / engineer line)	
Optical camera cable port	Manufactured by Lemo	

**<Base Station>**

**Basic specifications**

Temperature	0°C to 40°C
Humidity	30% to 85% (no condensation)
Power	AC IN: 100 V to 240 V AC * Camera power supply is available using a camera optical cable (max: 1 km).
Consumption	Single operation: 268 W (at 100-120V) 268 W (at 220-240V) If camera head is connected: 389 W (at 100-120V) 381 W (at 220-240V)
Dimensions	430 (W) x 88(H) x 500 (D) mm (excluding projecting parts)
Weight	15.4 kg
Consumables (at 24-hour operation)	Cooling fan (P-1546-2): Replace every 4 years (at normal temperature) Button battery (for memory backup) CR2032 : Replace every 5 years (at normal temperature) Fuse: Slow blow 5.2x20 mm, 5.0 A / 250 V

**Technical specifications**

Video output (camera mode)		
CH A1-4 CH B1-4	4K mode	x 2 (3840 x 2160p) / 59.94, 50 (4:2:2) 3G-SDI x 4, SQD (Level-A/B, SQD)
	HD mode	x 8 (1920 x 1080i/p) / 59.94, 50
	75Ω BNC x 8	Live or slow video
HD SDI 1-2	4K/HD mode	x 2 (1920 x 1080i): 1080i / 59.94, 50
	75Ω BNC x 2	Live or slow video
Video input		
RET 1 RET 2	(1920 x 1080i) / 59.94, 50 75Ω BNC x 2	
Genlock input	BB: NTSC: 0.429 Vp-p, PAL: 0.45 Vp-p or, Tri-level Sync: 0.6 Vp-p 75Ω BNC x 1 (w/ loopthrough, 75-ohm auto termination)	
Genlock mode	Internal sync or External sync (B.B. or Tri-level sync)	
Memory partition	1 to 16 segments	
Recording duration		

4K High Speed			HD High Speed		
Frame rate (major)	Recording time	Image size	Frame rate (major)	Recording time	Image size
24 fps	409.2 sec	4096×2160 pixel	24 fps	1365.2 sec	1920×1080 pixel
50 fps	196.4 sec		50 fps	655.3 sec	
60 fps	163.6 sec		60 fps	546.1 sec	
100 fps	98.2 sec		100 fps	327.6 sec	
120 fps	81.8 sec		120 fps	273.0 sec	
150 fps	65.4 sec		150 fps	218.4 sec	

200 fps	49.1 sec		180 fps	182.0 sec
240 fps	40.9 sec		300 fps	109.2 sec
300 fps	32.7 sec		360 fps	91.0 sec
350 fps	28.0 sec		480 fps	68.2 sec
360 fps	27.2 sec		500 fps	65.5 sec
400 fps	24.5 sec		600 fps	54.6 sec
480 fps	20.4 sec		750 fps	43.6 sec
500 fps	19.6 sec		900 fps	36.4 sec
* Audio are not recorded.			1050 fps	31.2 sec
			1200 fps	27.3 sec

SSD cartridge slots	(For FT-ONE2T/FT-ONE-1TL option)
No of slots	2
Replacement method	Hot-swap supported with no access
Intercom system	
COMMUNICATION	25-pin D-sub (female) x 1 Intercom x 2 lines (ENG/PROD) if 4WIRE or 2WIRE selected. PGM 2 lines GPI 2 inputs (Default: R TALLY IN, G TALLY IN)
HEAD SET	4-pin XLR (male) x 1 (For intercom connection)
INTERCOM IN1, IN2	3-pin XLR (male) x 2 (when Clear-Com is selected)
Interface	
LAN	100BASE-TX/1000BASE-T RJ-45 x 1 (For FT-1RUA/RUB and FT-1RCP connection)
Optical camera cable connector	Manufactured by Lemo
Flicker correction (Option)	Applicable to live and recorded footage in built-in memory and SSD cartridges, in real time. (Not applicable to VF-OUT and HD-SDI 1/2) FT-1RUA/RUB required for flicker correction control.

#### <SSD Cartridge (Option) Specifications >

Model	FT-ONE2T	FT-ONE-1TL
Capacity	76,000 frames	38,000 frames
Recording speed	Apr. 27 sec/1,000 frames	Apr. 27 sec/1,000 frames
Playback frame rate	60 fps (max)	60 fps (max) *
Weight	0.6 kg	0.6 kg

\* In rare cases, a frame may be output twice when playing back at a frame rate higher than 15 fps.

#### Options

FT-ONE-LS-FC	Flicker correction
Connector Conversion Cables	Conversion cables from waterproof camera head connectors to general-purpose connectors
FT-ONE2T	SSD Cartridge (2 TB)
FT-ONE-1TL	Low-cost SSD Cartridge (1 TB)

FT-1RUA FT-1RUB	Remote Control Unit (Including dedicated 16 VDC adapter)
FT-1RCP	Remote Control Panel (Including dedicated 16 VDC adapter)
FT-1READ	RAW to DPX data converter Including keyboard and mouse (FT-ONE SSD Reader and FT-ONE Player installed)
FT-1CDS	SSD Cartridge Docking Station (Including dedicated 16 VDC adapter)

**<Camera Head Accessories>**

Tripod Adapter

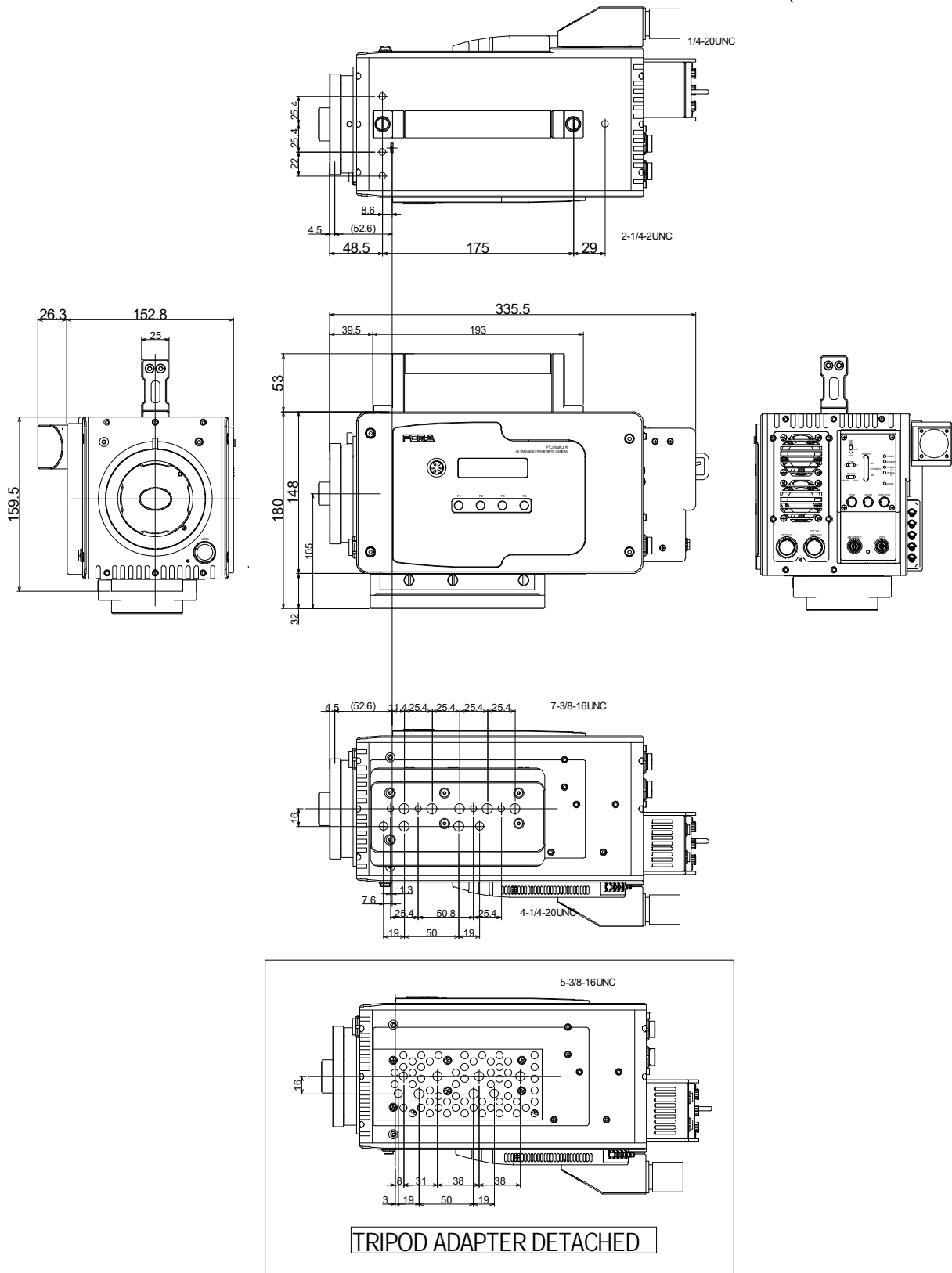
**<Base Station Accessories>**

AC cord, Rack mount brackets, Rubber feet, and Operation manual

**2. External Dimensions**

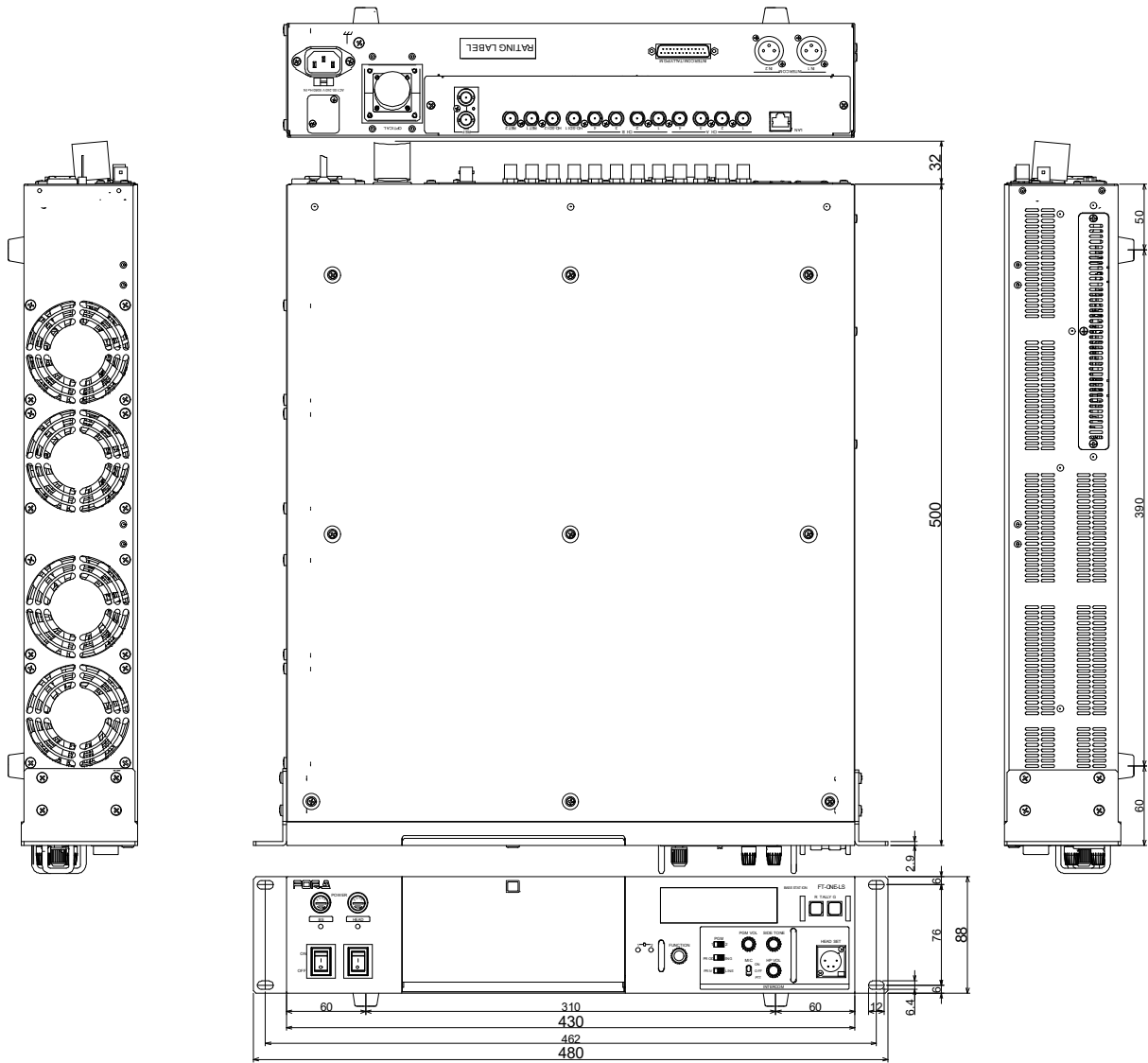
**FT-ONE-LS (Camera Head)**

(All dimensions in mm.)



**FT-ONE-LS (Base Station)**

(All dimensions in mm.)



**FT-ONE2T / FT-ONE-1TL**

(All dimensions in mm.)

