

Visualyze® Video Processing Unit

ENA-10570-AS

USB 3.0 and HDMI module with recording
IEC 60601-1 and 60601-1-2 compliant

Enable, Inc.
Imaging Innovations



PRODUCT BRIEF

video processing unit with USB 3.0
and HDMI output and recording capability;
compatible with all Visualyze® scopes

introduction:

Enable Inc has developed this module to be used with any of the Visualyze® scope models.

This is a USB 3.0 UVC (USB Video Class) compliant device, compatible with numerous commercially available USB camera applications. It also simultaneously offers HDMI video output.

Designed to meet IEC 60601-1 and IEC 60601-1-2. Compliant with part 15 of FCC rules.

Capable of recording still images and live video when an external USB flash drive is connected to it.

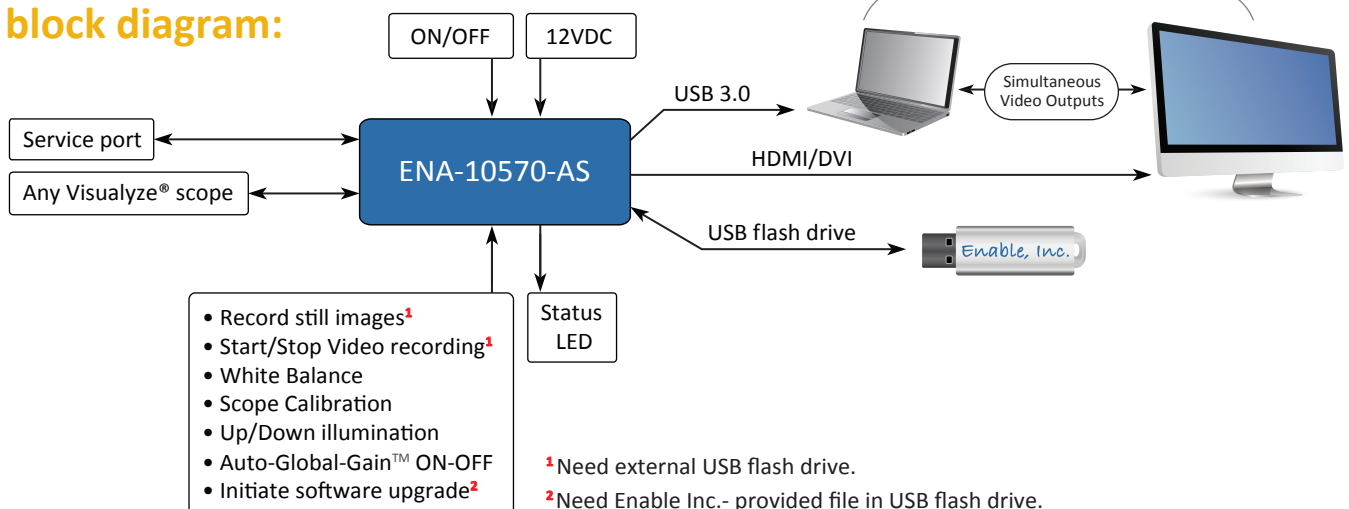
Multiple functions are available through the front panel button interface. Additionally, a service port is provided for external control of the unit and customization of numerous functions.

A universal 12VDC medical-grade power supply, HDMI cable, USB 3.0 cable, and a 32GB USB flash drive are provided with the module.

product features:

- Up to 1MP video output on the HDMI port
- Multiple simultaneous video outputs
- Compatible with all Visualyze® scope models
- Auto-Global-Gain®: (exposure & gain & light) adjusted automatically for best scene illuminance
- Store images and video onto external USB flash drive
- Multiple functions available through front button panel
- Programmable front button panel
- Controllable externally (ideal for custom solutions)
- Main PCB available for sale as well for integration into customer's controllers
- Field-enabled software upgrades through external USB flash drive

block diagram:



product specifications: ENA-10570-AS

power supply:

safety:	Approved to EN/IEC/UL60601-1, 3rd edition
EMC:	Meets UL/EN/IEC60601-1-2, 4th edition
isolation level:	2 MOPP requirements (input-output)
input voltage:	90-264VAC, 50/60Hz
input current:	115 VAC: 1.2 A; 230 VAC: 0.6 A
input AC inlet:	Class II desktop; IEC60320 C8 receptacle
output voltage:	12V DC; IP22 rated enclosure
output current:	2.5 ADC (max)
output power plug:	Ø5.5 x Ø2.5 x 9.5 mm Straight Barrel

electrical input:

input source:	AC/DC power supply (external)
input voltage	12 VDC (male center positive)
input Current	1.5 ADC (max)

cable (length):

AC cord:	2.43 m (8.0 ft); NEMA 1-15P to IEC-60320-C7
output DC cable:	1.45 m (4.8 ft)
HDMI:	1.8 m (6.0 ft)
USB:	USB3, 1.0 m (3.3 ft) Type A to micro-B

system:

Dimensions:	14 x 20 x 4.3 cm
(W x L x H)	(5.5" x 7.9" x 1.7")
Weight:	0.95 kg (2.1 lb)

data port (plastic or metallic IP rated):

14 pin	proprietary receptacle (connect to scope)
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USB port:

USB-A	USB2 port (copy data or SW upgrade)
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video output:

USB 3.0:	UVC compliant
Micro B	YUV422 format @30fps, 400x400 or 720x720
Video Content:	400x400 or 720x720
HDMI:	1080p @ 60fps
Video Content:	1,000x1,000

environmental:

operating pressure:	71 to 101 kPa
(altitude):	(3,000m to 0m at 25°C)
operating temperature:	10°C to 35°C
operating humidity:	up to 75% RH
storage pressure:	60 to 101 kPa
(altitude):	(4,267 m to 0 m at 23°C)
storage temperature:	-20°C to 70°C
storage humidity:	15% to 90% RH

media capture (into external USB flash drive):

still image format:	PNG
still image size:	400x400 or 720x720*
video file format:	MP4
video file size:	400x400 or 720x720*
still image size:	~300 kB or ~890 kB*
video size:	~12.7 or ~36.9 MB/minute

service port:

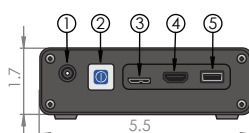
Micro USB:	Serial port for command terminal, to control and communicate with module
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*Size depends on sensor type

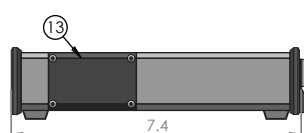
- 12VDC power jack.
- ON-OFF switch.
- USB3 - UVC compliant video output.
- HDMI video output.
- USB-A port: Copy data **OR** SW upgrade.
- Data port; Visualyze® scope connection.
- Image capture **OR** SW update.
SW update: requires USB drive with Enable Inc.-provided file.
- Start-Stop video capture.
- Adjust White Balance.
- Scope calibration.

- Decrease light output OR target scene-illuminance.¹
- Increase light output OR target scene-illuminance.¹
- 11.+12. (press at the same time)
toggle Auto-Global-Gain® ON/OFF.
- Remove panel to access service port for communicating externally with the video processing board.

¹ Depending on whether Auto-Global-Gain® is OFF or ON. Refer to Visualyze® tablet or VPU user manual for more information.



All dimension in inches:



Contact us for all your imaging needs and more detailed data sheets.

Internal video processing PCB board is also sold separately.