(Project Name) (Project Location)

ARCHITECT & ENGINEER SPECIFICATIONS SECTION: EDGE ANALYTICS DEVICES

REA-C1000

Edge Analytics Appliance (Software version 2.00 or later)

PRODUCTS

EDGE ANALYTICS APPLIANCE SPECIFICATIONS

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A. MAIN FEATURES:

- The unit shall analyze video that is input from a camera, computer, or other device, and automatically generates video content in realtime that previously would have required significant time and human resources, and been expensive to create. The unit's configuration and application operation shall be able to control intuitively using a simple screen displayed in a web browser on a computer connected to the network.
- 2. Handwriting Extraction Application

This application shall identify and extract text and diagrams drawn on a whiteboard or blackboard in real-time and shall render them so that they appear in front of the speaker.

- JPEG log shall be able to generate at any timing.
- This application shall be able to use on both blackboard and whiteboard.
- This application shall be able to see the movement of characters and speaker at the same time.
- 3. PTZ Auto Tracking Application

This application shall track a moving target, and shall automatically move a remote camera to maintain optimum composition while shooting.

- This application shall use face detection to make it operations less at the start of tracking.
- This application shall use motion detection to improve accuracy during tracking.
- This application shall identify the color of clothing to improve accuracy during tracking.
- This application shall identify the shapes to improve accuracy during tracking.
- This application shall be able to choose from two types (full body/upper body) of angles.
- This application shall be able to keep the desired content on the screen while tracking a speaker.
- This application shall be able to recover automatically even if "Target Lost" occurs during tracking.
- 4. Close-up by Gesture Application

This application shall interpret specific gestures of a person, from the video and shall automatically zoom in on the corresponding area. This application shall be able to display two images (a wide angle view and zoomed view) in real-time.

The function shall be triggered on when a person stands up from a seated position. The application shall electronically zoom in on the area around that person (a close-up) and shall output the zoomed image. When the person sits down, the function shall be triggered off, the zoom shall be canceled, and the image shall return to the previous state. The original image shall also be able to output at the same time as the zoomed image.

5. Chroma key-less CG Overlay

This application shall be able to generate simple CG composite content in real-time, without requiring a studio with dedicated green or blue screen facilities.

- This application shall be able to have four layers, and can be used for company logos, CG sets and input from HDMI in addition to background images.
- HDMI OUT2 shall be able to use as a feedback monitor video for speakers.
- HDMI OUT2 video shall be able to flip left and right.
- 6. Real-time Cropping Application

This application shall simultaneously display a wide-angle view and a cropped view, from a single camera, by cutting out a desired portion of the whole view in real-time. The focus area extraction function shall include a "Focus Area Cropping" function that automatically tracks and extracts a specific object, and a "Fixed Area Cropping" function that extracts a specified area.

- This application shall use motion detection to improve accuracy during tracking.
- This application shall identify the color of clothing to improve accuracy during tracking.
- This application shall identify the shapes to improve accuracy during tracking.
- 7. IP Streaming

This device shall support multi-streaming function. This device shall be able to output streams with different image sizes. Note:

Handwriting Extraction, PTZ Auto Tracking, Close-up by Gesture, Focus Area Cropping and Chroma key-less CG Overlay option functions must be enabled before configuring or running each application.

Activate the corresponding preinstalled license, or purchase and install a license.

Tips:

A license is not required to use the Fixed Area Cropping function, but a Focus Area Cropping license is required to use the Focus Area Cropping function.

B. VIDEO:

1. The image size (resolution and frame rate) of the video signals delivered through the HDMI IN/OUTPUT terminal shall be as follows.

Video input signal

HDMI IN 1 connector 3840×2160/29.97p 1920×1080/59.94p 3840×2160/25p 1920×1080/50p HDMI IN 2 connector 1920×1080/59.94p 1920×1080/50p

Video output signal

HDMI OUT 1 connector 3840×2160/29.97p 1920×1080/59.94p 3840×2160/25p 1920×1080/50p HDMI OUT 2 connector 1920×1080/59.94p 1920×1080/50p

C. AUDIO:

1. The camera shall support the following audio signals through the HDMI IN/OUTPUT terminal.

Audio input signal

HDMI IN 1 connector / HDMI IN 2 connector LCPM, 16-bit, 2ch stereo 48 kHz/44.1 kHz/32 kHz MIC IN connector Audio conversion to LPCM, 16-bit, 2ch stereo, 48 kHz

Audio output signal

HDMI OUT 1 connector / HDMI OUT 2 connector LCPM, 16-bit, 2ch stereo 48 kHz/44.1 kHz/32 kHz

D. SYSTEM REQUIREMENTS & NETWORK:

1. The supported operating systems shall be Windows 10 Pro (32-bit version, 64-bit version)

The supported web browser shall be Google Chrome Ver. 70 or later

Notes:

- Turn off tablet mode.
- Do not use the Back button of the browser.
- JavaScript is used for the web page display when accessing the unit. The web page may not display correctly if your computer uses certain software, such as anti-virus software.

E. INETERFACES:

- 1. The unit shall have HDMI (Type A x 4) connector. HDMI In x 2, HDMI Out x 2
- The unit shall have a LAN (network) terminal (RJ-45(1000BASE-T/100BASE-TX/10BASE-T)). Network communication shall be provided using the network cable (category 5e or higher, shielded twist pair).
- 3. The unit shall have a USB terminal (External connector).
- 4. The unit shall have a mini jack connector to support external microphone (Stereo, ø3.5 mm mini jack, plug in power 5 V).
- 5. The unit shall have a power terminal of IEC 60130-10 Type A (5.5 mm outer diameter, 2.5 mm inner diameter).



F. GENERAL SPECIFICATIONS:

- 1. The unit input power shall be 12 V DC (Use an AC adapter (not supplied)).
- 2. Power consumption for the unit shall be 40 W with 12 V DC input.
- 3. The unit operating temperature shall be within the following range: 5 °C to 40 °C (41 °F to 104 °F)
- 4. The unit storage temperature shall be within the following range: -20 °C to +55 °C (-4 °F to +131 °F)
- The unit dimensions (W x H x D) shall be approximately: 141 × 97 × 91 mm (5 5/8 × 3 7/8 × 3 5/8 inches) (without protrusions)
- 6. The unit shall weigh approximately 860 g (1 lb 14 oz).
- 7. The body color shall be black.

G. REGULATORY SPECIFICATIONS:

- 1. CB (IEC60950-1:05+A1:09+A2:13)
- 2. EMC (EN55032:2015(A), EN55024:2010+A1:2015)
- 3. EMC-TR (CU-TR 020/2011(EMC-TR))
- 4. FCC/ISED (Class A Digital Device)
- 5. UL (UL60950-1,CSA C22.2 No60950-1)
- 6. VCCI (Class A)
- 7. KC(MSIT) (KN32(A), KN35)
- 8. RCM (EN55032:2015 Class A)

H. SUPPLIED ACCESSORIES:

* None

I. OPTIONAL LICENSES:

- 1. REA-L0100 Handwriting Extraction license
- 2. REA-L0200 PTZ Auto Tracking license
- 3. REA-L0300 Close-up by Gesture license
- 4. REA-L0400 Chroma key-less CG Overlay license
- 5. REA-L0500 Focus Area Cropping license

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J. DIMENSIONS:

Unit: mm (inches)



1) Mounting screw holes (M3)

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