

# M60-12U

## Multi-service Video Management Platform



### Features:

- 19" standard 12U ATCA industry box
- Easy and flexible configuration with pluggable card module design
- Function card supports hot-swap
- 80ch@4K or 200ch@1080P signal encoding (full configured)
- 240ch@4K or 960ch@1080P or 3840ch@D1 signal decoding (full configured)
- Support analog/digital video signals input and matrix output
- Support SD/HD video signal matrix switch and output
- Support non-compressed digital signal encoding output
- Support switch via network keyboard, client-end and etc.
- 8 RJ-45 ports and 8 optical ports (can't be used simultaneously) for matrix control, preview and online central storage.
- Support TCP/IP/RTP/RTSP/RTCP/TCP/UDP/DHCP and etc. network protocols
- Remote cast analog/digital video onto the video-wall
- Remote reboot/upgrade/default setting and etc operations

### Technical Specification

#### Model

|       |         |
|-------|---------|
| Model | M60-12U |
|-------|---------|

#### System Parameter

|                  |  |
|------------------|--|
| Main Processor   | 64-bit Quad-core Embedded Microprocessor                         |
| Operating System | Embedded LINUX   |
| Bus              | PCI-E, LAN   |
| Slot             | 11(1 Main Control Board Slot, 10 Video and Audio Function Board) |

#### System Configuration

|                          |   |
|--------------------------|---|
| Mainframe                | Redundant Power, Main Control Board, PCI-E Bus Rear Panel, Smart Temperature Controlled Fan |
| Video Input Card         | Max. 10   |
| Video Output Card        | Max. 10   |
| Cascaded Fiber Link Card | Optional  |

#### Network Access Capacity

|                |   |
|----------------|---|
| Network Access | 8 RJ-45 ports(10/100/1000M)<br>Optical ports Optional |
|                | 8Gbps Network Interface Bandwidth                     |
|                | 5000 Cameras Access                                   |
|                | Max.320 1080P@8M Forward capability                   |



### Matrix Exchange and Splicing Control Capacity

|                                   |               |  |
|-----------------------------------|---------------|--|
| Decoding card Video-Wall Splicing | Splicing      | Max 180 splicing screens                           |
|                                   | Video Wall    | Support Splicing Zoom/Merge/Roam/Overlay           |
|                                   | Input Source  | HD/SD, Digital/Analog (support mix input)          |
|                                   | Output Source | HDMI/DVI/VGA/BNC                                   |
|                                   | Control Mode  | WEB/Local GUI/Video Platform/Network Keyboard/iPad |

### Video Encoding Input

|                              |                          |  |
|------------------------------|--------------------------|--|
| VEC0805UH-M60 (DVI/VGA/HDMI) | Video Input              | 8CH HDMI, 2CH VGA, standard configuration support VGA, DVI, HDMI via adapter |
|                              | Encoding Format          | H.265/H.264/MJPEG  |
|                              | Encoding Capacity        | 4CH@4K(30fps), 10CH@1080P(60fps)   |
|                              | Audio Input              | 2, DB15 interface(2.0Vp-p, impedance:1KΩ)                                    |
|                              | Low-speed data interface | 1 RS485, Support current speed dome protocolSlotsH.                          |

|                              |                          |   |                     |                          |   |
|------------------------------|--------------------------|---|---------------------|--------------------------|---|
| VEC1605UH-M60 (DVI/VGA/HDMI) | Video Input              | 16CH HDMI, 4CH VGA, standard configuration support VGA, DVI, HDMI via adapter                       | VDC0905H-M60 (HDMI) | Decoding Capacity        | 12CH@12MP(15fps)/12CH@4K/48CH@1080p/96CH@720p/192CH@D1          |
|                              | Encoding Format          | H.265/H.264/MJPEG   |                     | Video Output             | 9CH HDMI  |
|                              | Encoding Capacity        | 8CH@4K(30fps), 20CH@1080P(60fps)  |                     | Audio Output             | 9CH, HDMI embedded audio and 1 DB15(VGA) (2.0Vp-p,1KΩ), G.711a  |
|                              | Audio Input              | 2, DB15 interface(2.0Vp-p, impedance:1KΩ)   |                     | Division                 | 1/4/6/8/9/16/25/36,custom                                       |
|                              | Low-speed data interface | 1 RS485, Support current speed dome protocol  |                     | Low-speed data interface | 2 RS285, 4/2 Alarm in/out                                       |
| VEC0804HD-M60 (DVI/VGA/HDMI) | Video Input              | DVI-I, standard configuration support VGA, DVI, HDMI via adapter                                    | VDC1205H-M60 (HDMI) | Decoding Capacity        | 16CH@12MP(15fps)/16CH@4K/64CH@1080p/128CH@720p/256CH@D1         |
|                              | Encoding Format          | H.264/MPEG4   |                     | Video Output             | 12CH HDMI   |
|                              | Encoding Capacity        | 8CH@1080P   |                     | Audio Output             | 12CH, HDMI embedded audio and 2 DB15(VGA) (2.0Vp-p,1KΩ), G.711a |
|                              | Audio Input              | 8, DB15 interface(2.0Vp-p, impedance:1KΩ)   |                     | Division                 | 1/4/6/8/9/16/25/36,custom                                       |
|                              | Low-speed data interface | 2 RS485, Support current speed dome protocol  |                     | Low-speed data interface | 2 RS285, 4/2 Alarm in/out                                       |
| VEC1604HC-M60 (HDCVI)        | Video Input              | BNC (1.0VP-P,impedance:75Ω)   | VDC1505H-M60 (HDMI) | Decoding Capacity        | 20CH@12MP(15fps)/20CH@4K/80CH@1080p/160CH@720p/320CH@D1         |
|                              | Signal System            | HDCVI   |                     | Video Output             | 15CH HDMI   |
|                              | Encoding Format          | H.264/MPEG4   |                     | Audio Output             | 15CH, HDMI embedded audio and 2 DB15(VGA) (2.0Vp-p,1KΩ), G.711a |
|                              | Encoding Capacity        | 16CH@1080P  |                     | Division                 | 1/4/6/8/9/16/25/36,custom                                       |
|                              | Audio Input              | 16, Support HDCVI standard, Video and Audio transmission in coaxial cable                           |                     | Low-speed data interface | 2 RS285, 4/2 Alarm in/out                                       |
|                              | Low-speed data interface | 2 RS485, Support current speed dome protocol, Support Video and Audio transmission in coaxial cable |                     |                          |   |
| VEC1604HS-M60 (HD-SDI)       | Video Input              | BNC(1.0VP-P,impedance:75Ω)  | VDC1805H-M60 (HDMI) | Decoding Capacity        | 24CH@12MP(15fps)/24CH@4K/96CH@1080p/192CH@720p/384CH@D1         |
|                              | Encoding Format          | H.264/MPEG4   |                     | Video Output             | 18CH HDMI   |
|                              | Encoding Capacity        | 16CH@1080P  |                     | Audio Output             | 18CH, HDMI embedded audio and 2 DB15(VGA) (2.0Vp-p,1KΩ), G.711a |
|                              | Audio Input              | 16, DB26 interface(2.0Vp-p, impedance:1KΩ)  |                     | Division                 | 1/4/6/8/9/16/25/36,custom                                       |
|                              | Low-speed data interface | 2 RS485, Support current speed dome protocol  |                     | Low-speed data interface | 2 RS285, 4/2 Alarm in/out                                       |
| VEC0804US-M60 (3G-SDI)       | Video Input              | BNC (1.0VP-P,impedance:75Ω)   | VDC1204B-M60 (CVBS) | Decoding Capacity        | 32CH@1080P/128CH@D1   |
|                              | Encode Format            | H.264/MPEG4   |                     | Video Output             | 12CH BNC  |
|                              | Encoding Capacity        | 8CH@1080P   |                     | Audio Output             | 12CH line out, DB15, for the corresponding 1-12CH video output  |
|                              | Audio Input              | 8, DB26 interface(2.0Vp-p, impedance:1KΩ)   |                     | Division                 | 1/4/6/8/9   |
|                              | Low-speed data interface | 2 RS485, Support current speed dome protocol  |                     | Low-speed data interface | 2 RS485, Support current speed dome protocol                    |

### Video Decoding Output

|                     |                          |  |
|---------------------|--------------------------|--|
| VDC1204B-M60 (CVBS) | Decoding Capacity        | 32CH@1080P/128CH@D1  |
|                     | Video Output             | 12CH BNC   |
|                     | Audio Output             | 12CH line out, DB15, for the corresponding 1-12CH video output |
|                     | Division                 | 1/4/6/8/9  |
|                     | Low-speed data interface | 2 RS485, Support current speed dome protocol                   |

### System Cascade

|               |                  |  |
|---------------|------------------|--|
| VFC0804JC-M60 | Optical Module   | 8, SFP internal  |
|               | Interface        | FC, (2 in single board)  |
|               | Cascade Capacity | 16CH@1080P(30fps) or 64CH@D1, Support Ethernet and direct transmission via RS485 |

# M60-12U

## Main Control Interface

|                         |  |
|-------------------------|--|
| Output Interface        | 1, VGA and DVI   |
| Communication Interface | 8, RJ45(1000M) or 8, SFP(Alternative)  |
| Serial Interface        | 1, RS-232, For the parameter configuration, device maintain, transparent channel |
| USB                     | 4, USB2.0, 2 in each side of front and after                                     |

## Others

|                       |  |
|-----------------------|--|
| Power                 | 100~127V AC and 200~240V AC, 50/60Hz                         |
| Power Consumption     | ≤800W  |
| Operating Temperature | 0°C~ +50°C (32 °F to 122 °F)                                 |
| Operating humidity    | 10~90%RH / 86~106kpa   |
| Dimension(mm)         | 12U, 482.6 × 481.6 × 533mm(19 × 18.96 × 20.98 inch), (W*D*H) |
| weight                | ≤40Kg (88.18 lb) (full configured)                           |

## Ordering Information

| Type                      | Part Number | Description                                  |
|---------------------------|-------------|--|
| Video Management Platform | M60-12U     | 4K, H.265 & Ultra powerful decoding capacity |

## Dimensions (mm/inch)

