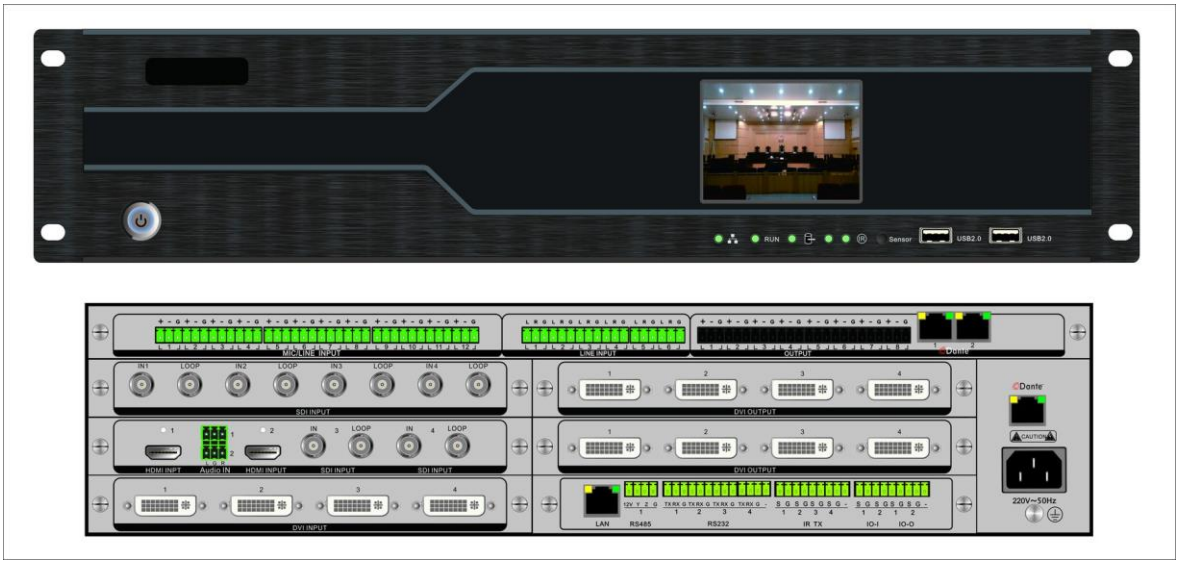
QG-2U12Y Datasheet

Medical Integrated Host



Overview

The unit is a 2U integration host for surgical teaching and tele-consultation. Signal switching, encoding, recording, multi-party conferencing and device control run inside one chassis. Twelve inputs and eight outputs are carried on hot-swap channel cards, alongside twelve microphone inputs, a Dante interface and two composition engines.

Key Features and Benefits

12 x in, 8 x out, card-based

Five card slots, four channels per card. HDMI, DVI, VGA, SDI, CVBS, YPbPr, HDBaseT and fiber cards share one chassis and can be replaced with power on.

4K picture compositing

Two independent compositing engines, output up to 4K. More than 20 layout templates and 10 transition types, no black frame during switching.

Audio chain for medical recording

12 microphone inputs with 48V phantom power, echo, howling and steady-noise suppression plus 10-band EQ. Voice-activated switching, built-in 2x2 Dante.

10-channel synchronized recording

H.265/H.264 with per-channel resolution, bitrate and sample-rate control. 2TB built in, up to 8TB per disk, multi-task segmented recording and automatic FTP upload.

Telemedicine and live casting

H.323/SIP/RTSP/RTMP interaction, built-in 4-party conferencing. Caption and logo overlay, privacy masking with mosaic.

Three operation entries

B/S, C/S and GUI interfaces. Browser-editable control pages, keyboard and mouse over KVM, 4.3-inch front touchscreen with live preview.

Specifications

Enclosure and construction	
·	2U chassis, 19 in rack mount, card-based construction
·	4.3 in touch panel on the front for preview and menu operation
·	Three input slots and two output slots, four channels per card, 12 inputs and 8 outputs per unit
·	Channel cards hot-swappable for maintenance and expansion while running
·	Card types: HDMI, DVI, VGA, SDI, CVBS, YPbPr, HDBaseT and fiber
·	OSD text overlay on any output channel
Audio	
·	Twelve microphone inputs with 48 V phantom power
·	Six stereo line inputs
·	Four channels of decoded audio return
·	Eight balanced audio outputs
·	Six embedded audio outputs on the encoding paths
·	Built-in 2 by 2 Dante module, two channels in and out
·	Echo cancellation, feedback suppression, steady noise suppression and ten-band EQ
·	Voice activation drives the picture cut
·	Voice alteration on microphone channels
Control	
·	Four IR emitter ports and one IR learning input
·	Four RS-232 serial ports
·	One RS-485 port
·	Four general purpose I/O ports
·	Two USB ports for an external optical drive and on-the-fly archiving
Encoding and recording	
·	H.265 and H.264 video, AAC and G.711 audio
·	Resolution, bitrate and sample rate set per channel
·	Ten channels of synchronised audio and video encoding
·	Four channels of audio and video decoding
·	Subtitle and station logo overlay
·	Privacy masking with mosaic over the masked area
·	Motion detection triggering an automatic cut
·	Two independent composition engines
·	More than twenty built-in layout templates covering 2, 4, 6 and 8-way split and picture-in-picture
·	Ten or more transitions including wipe, dissolve, push and cut through black
·	Composition output up to 4K, configurable
·	Remote protocols H.323, SIP, RTSP and RTMP
·	Built-in four-party conference with address book and group calling
·	2 TB internal storage, single drive replaceable to 8 TB
·	Ten channels of synchronised audio and video recording
·	Recording start by manual trigger, schedule or power-on
·	FTP upload by manual trigger, schedule or on recording end
·	Live streaming, video on demand, file browsing, download and delete
·	Multi-job segmented recording
·	Recordings played back directly from a local output
·	Push to third-party platforms with a viewing QR code
Protocols and management	
·	TCP, UDP, RTSP, RTP, RTMP, ONVIF, H.323, SIP and HTTP
·	Management through browser, client software and local GUI
·	Eight channels of live HD preview with click-to-switch
·	Preview magnification on any output channel
·	Scene storage and recall by number
·	Live audio level display with fader control per channel
·	Control pages edited online with images, text and buttons
·	Keyboard and mouse over the KVM path to the host management interface

·	Embedded audio follows the video through a switch
·	Layout shared between the remote endpoint and the local composition, layout editable

Interfaces

Port	Qty	Connector	Typical use
HDMI inputs	12	3 slots x 4 channels, Type-A	Cameras, PCs, evidence sources, up to 4K60
HDMI outputs	8	2 slots x 4 channels, Type-A	Screens, monitors, remote decode
Microphone inputs	12	Balanced, 48 V phantom	Desk and ceiling microphones
Line inputs	6	RCA / terminal block	Mixer, remote audio
Line outputs	8	Terminal block	Amplifier, active speakers
Dante	2x2	RJ45	Network audio in and out
Control	4 / 1 / 4	RS-232 / RS-485 / IO	PTZ, display, peripherals
Infrared	4 out, 1 learn	3.5 mm emitter	Air conditioners, displays
Network	3	RJ45	Management, media and Dante
Touchscreen	1	4.3 inch	On-unit preview and shortcuts

In the Box

Host unit: 1, aged and self-tested before packing

Power cord: 1 standard cord; adapter models ship with one external adapter

Rack hardware: One pair of ears; portable models ship with the handle fitted

Quick start: 1, wiring and first power-on steps

Certificate: 1, printed with the serial number

Storage drive: 1, already fitted, capacity in the specifications

Installation Environment

Operating temperature: 0 C to 40 C

Operating humidity: 10% to 90%, non-condensing

Storage temperature: -20 C to 60 C

Altitude: up to 3000 m

Clearance: 100 mm at intake and exhaust, unobstructed in the rack

Grounding: Rack ground resistance 4 ohm or less, conductor 1.5 mm2 or larger

Ordering Information

Model	Description
QG-2U12Y	Medical integrated host, 12 x in, 8 x out, card-based

Company Information

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