

# HDMI portable checker **GF-100**

The IDK GF-100 is a handy video analyzer for HDMI/DVI devices. The GF-100 can be used for testing source/sink devices, monitoring DDC between source and sink devices, testing signal transmission, and so on.

Specification Source test / cable test / transmission test

Item			Description
Video	HDMI / DVI	Number / Signal	1 input / HDMI Deep Color (*1) / DVI 1.0 / HDCP 1.4 - TMDS single link - TMDS clock: 25 MHz to 225 MHz - Dot clock 25 MHz to 165 MHz
		Connector	1 female HDMI Type A
Audio	Digital Audio	Number / Signal	1 input / Multi-channel LPCM up to 8 channels - Sampling frequency: 32 kHz to 192 kHz - Sample size: 16 bit to 24 bit - Reference level:-20 dBFS - Max. input level: 0 dBFS
		Connector	1 female HDMI Type A
Functions			Video status display - Resolution / Frame rate / Aspect Ratio / HDMI signal status / DVI signal status / HDCP status / Color space / color depth / DDC voltage status / Video timing / Dot clock frequency / Info frame information / etc Audio status display - Audio format / number of audio channel / sampling frequency / sample size / speaker position / Info frame information / etc EDID emulation (with copy function) Comparing transmitted signal and received signal by test signal Source status is output to terminal software Status log display and confirmation by web browser

## Sink test / cable test / transmission test

ltem			Description
		Number / Signal	1 output / HDMI Deep Color (*1) / DVI 1.0 / HDCP 1.4 - TMDS single link - TMDS clock: 25 MHz to 225 MHz - Dot clock 25 MHz to 165 MHz
		Connector	1 female HDMI Type A
Video	HDMI / DVI	Test pattern output Format	Color space: RGB 4:4:4 / YCbCr 4:2:2 / YCbCr 4:4:4 Color Depth: 24 bit, 30 bit, 36 bit Deep Color Resolution: 480i / 480p / 576i / 576p / 720p / 1080i / 1080p VGA / SVGA / XGA / WXGA (1280x768) / WXGA (1280x800) / Quad-VGA / SXGA / WXGA (1360x768) / WXGA (1366x768) / SXGA+ / WXGA+ / WXGA/ / WSXGA+ / WUXGA / QWXGA *WUXGA/QWXGA are output as Reduced Blanking
	Digital Audio	Number / Signal	1 output / Multi-channel LPCM up to 8 channels - Sampling frequency: 32 kHz to 192 kHz - Sample size: 16 bit to 24 bit - Reference level:-20 dBFS - Max. input level: 0 dBFS
Audio		Connector	1 female HDMI Type A
		Test tone output Format	1 output / Multi-channel linear PCM up to 8 channels - Sampling frequency: 48 kHz - Sample size: 24 bit - Reference level:-20 dBFS - Max. input level: 0 dBFS
Functions			Sink device specification display - Supported resolution / HDMI signal support or not / HDCP support or not / Color space / color depth / speaker position / EDID information / etc Test pattern output - Color bar / gray scale / crosshatch / stripe / raster / etc Test tone output - Test audio / speaker test by each audio channel (1000 Hz / 400 Hz / 80 Hz / 40 Hz) Comparing transmitted signal and received signal by test signal Status display by web browser / EDID information download

# **DDC Monitoring**

Item	Description	
Operation	Pass through	
Connector	2 female HDMI Type A	
Functions	DDC communication check and display between source device and sink device - Hot Plug voltage / DDC voltage / EDID / HDCP Communication log is output to terminal software Communication log display and confirmation by web browser	

## LAN

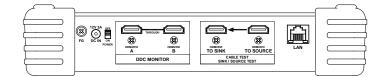
ltem		Description
LAN	Number / Signal	1 port / 10Base-T (Auto Negotiation), 100Base-TX (Auto Negotiation), Auto MDI/MDI-X
LAN	Connector	1 RJ-45

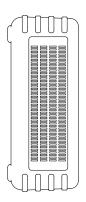
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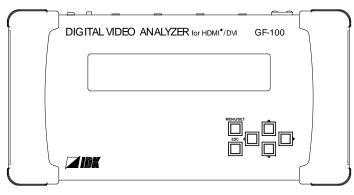
Item	Description
AC adapter	Input: 100 - 240 VAC ± 10%, 50 Hz / 60 Hz ± 3 Hz Output: DC 12V 3A (AC adapter supplied)
Power consumption	About 11 Watts
Dimensions	10.2 x 2.1 x 5.2" (260(W) x 53.5(H) x 133(D) mm)
Weight	2 lbs. (0.9 kg)
Temperature	Operating: 32°F to 104°F (0°C to +40°C) Storage: -4°F to +176°F (-20°C to +80°C)
Humidity	Operating/Storage: 20% to 90% (Non Condensing)

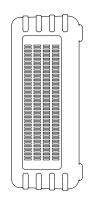
\*This product supports 36 bits/pixel Deep color (12 bit/component). It does not support x.v.Color, 3D, ARC, HEC and CEC.

## Front & Rear Panel









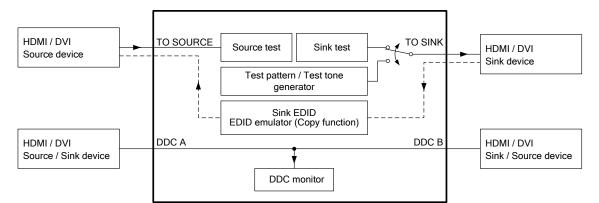
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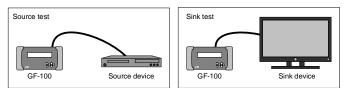


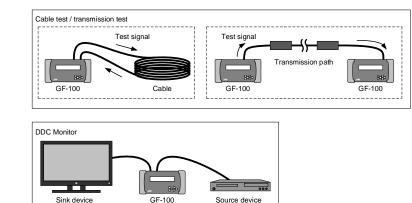
# HDMI portable checker GF-100 Diagram and Features

#### Diagram



### Sample connection diagram





#### [Features]

- Testing source devices
- Video status display
- Resolution / Frame rate / Aspect Ratio / HDMI signal status / DVI signal status / HDCP status / Color space / color depth / DDC voltage status / Video timing / Dot clock frequency / Info frame information / etc...
- Audio status display
- Audio format / number of audio channel / sampling frequency / sample size / speaker position / Info frame information / etc...
- EDID emulation (with copy function)
- Comparing transmitted signal and received signal by test signal
- · Source status is output to terminal software
- · Status log display and confirmation by web browser

# Testing sink devices (Monitor)

- Sink device specification display
- Supported resolution / HDMI signal support or not / HDCP support or not / Color space / color depth / speaker position / EDID information / etc...
- Test pattern output
- Color bar / gray scale / crosshatch / stripe / raster / etc...
- Test tone output
- Test audio / speaker test by each audio channel (1000 Hz / 400 Hz / 80 Hz / 40 Hz)
- · Comparing transmitted signal and received signal by test signal
- · Status display by web browser / EDID information download

## Monitoring DDC

- DDC communication check and display between source device and sink device
- Hot Plug voltage / DDC voltage / EDID / HDCP
- Communication log is output to terminal software
- Communication log display and confirmation by web browser

## Transmission test (Cable)

Comparing transmitted signal and received signal by test signal

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