Short FAQs about Eco Capture

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1. Which operating systems do Eco Capture cards provide drivers for?
Eco Capture cards provide drivers for Windows and Linux, but not for Mac.

2. What are the dimensions of Eco Capture cards?
Eco Capture cards are of the M.2 2280 size, which is 22mm wide and 80mm long. The height varies slightly depending on the model and heat sink. For details, you can contact our sales team through sales@magewell.com.

3. Can Eco Capture cards be connected to the mSATA interface on the mainboard?
No. Eco Capture cards use the M.2 M Key interface, and should be connected to the M.2 interface that uses the PCIe bus.

4. What are the main differences between Eco Capture cards and Pro Capture cards?
Pro Capture cards are intended for desktop computers. They support a wider range of interfaces and provide multi-channel capture up to 4K60fps. Developers can use all the APIs provided in the Magewell MWCapture SDK.
Eco Capture cards are designed for small-size or portable computer cases that are not equipped with full-size PCIe slots. Their power consumption is lower. However, limited by the M.2 2280 size, Eco Capture cards can only capture four-channel 3G SDI signals or one-channel 4K60fps signal at most. Besides, they do not support OSD, cropping, aspect ratio conversion, and outputting multiple streams for a single input stream.

5. Are Eco Capture cards compatible with mainboards or developer boards like Nano and Xavier?
Yes, Eco Capture cards are compatible with Nano and Xavier developer boards.

6. Do Eco Capture cards support 10-bit color depth?
Yes, Eco Capture cards support 8/10/12 bit color depth.
7. What is the latency of Eco Capture cards?

For 1080p60 signals, the latency is about 60ms. The latency may vary depending on the receiving application used.

8. How much less power do the Eco Capture cards consume than Pro Capture cards? Will the temperature of their core chip be high?

When the interface type and number of captured channels are the same, the power consumption of Eco Capture cards is 30% to 70% less than Pro Capture cards.

Eco Capture cards are suitable for portable computer cases. However, since the M.2 2280 size is relatively small (hence the heat sink size is limited), you need to pay special attention to the overall heat dissipation of your computer case. The standard heat sink on the Eco Capture cards are mainly used for dissipating the heat of the FPGA chip, while you should ensure that the internal structure of your case can dissipate away the heat in the case in time. We recommend that the core chip temperature of the card stay no higher than 85°C. The temperature can be obtained using software like AMCap or related interface in the MWCapture SDK of Magewell.

9. Do Eco Capture cards support capturing ANC data?

Eco Capture SDI cards support extraction of HANC or VANC data. But this function must be implemented using MWCapture SDK V3.x. For details about the specific interfaces and procedures, see http://magewell.com/developer/21/detail.

10. Does Magewell provide SDK for Eco Capture?

Yes. The latest V3.3.x.x SDK versions support Eco Capture cards.