



4K Digital Video Camera More Bits, Less Weight



Low Weight



Small Size,
Low Profile



Low EMI

The Customer's Challenge

The latest must-have TV technology is 4K Ultra HD TVs. Although content isn't as widely available as other HD content, we are now seeing streaming services and some TV channels offering 4K content. And 6K and 8K TVs are a step behind!

A manufacturer of professional handheld digital video cameras was looking for a way of powering their latest high-tech device, understanding that size matters, and that every extra gram creates a problem for the user – especially when they are used over long periods of time.

Meeting the necessary EMI requirements can further impact size and weight.



The Solution

The battery fed 380V to a DCM DC-DC converter module, to provide the required 12V.

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The Results

Weighing just 29.2g, and measuring 47.91 x 22.8 x 7.26mm, the DCM is lighter and smaller than other DC-DC converters. In addition, the DCM's high frequency switching (up to 1MHz) requires smaller filtering components, which further reduces the size and weight of the camera.

Product Family Key Specifications

DCM™ DC-DC Converter Module

Input Voltages	9 – 50V _{DC} , 16 – 50V _{DC} , 18 – 36V _{DC} , 36 – 75V _{DC} , 120 – 420V _{DC} , 160 – 420V _{DC} , 200 – 420V _{DC}
Output Voltages	5V, 12V, 13.8V, 15V, 24V, 28V, 36V, 48V
Output Power	4623 ChiP: Up to 600W 3623 ChiP: Up to 320W
Efficiency	Up to 93%
Dimensions	4623 ChiP: 47.91 x 22.8 x 7.26mm 3623 ChiP: 38.72 x 22.8 x 7.26mm