

# CGD's ultra-compact **GaN PD charger**

ADVANCED POWER CONVERSION SOLUTIONS FOR TODAY'S PORTABLE WORLD

#### Portable devices need charging on the go. Users demand one compact, standardised, lightweight charger compatible with all their devices.

The miniaturisation of power devices requires GaN technology combined with advanced magnetics. The key challenge is to minimise the power dissipated inside of the charger to ensure safe and reliable operation for the user on the outside.

The CGD PD charger uses ICeGaN® technology and smaller magnetics than rivals to achieve a state of the art efficiency. A single PCB construction, with no requirement for heat sinks, and a low-cost quasi-resonant flyback (QRF) topology keeps

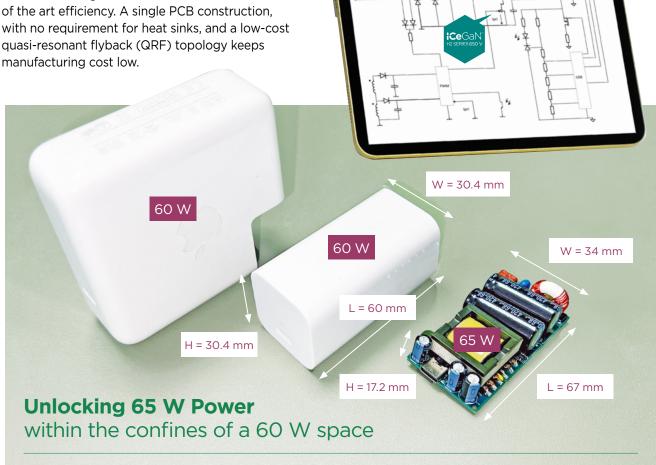
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**Features** 

The USB-C output provides an output voltage from 5 V @ 3 A to 20 V @ 3.25 A in response to demand signals received from the portable device being charged.

**Elegant and** 

low cost design



High power density resulting from...

efficiency

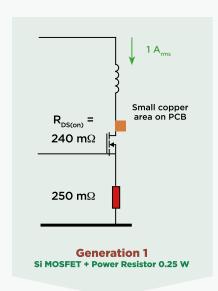
**ICeGaN®** 

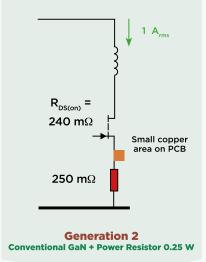
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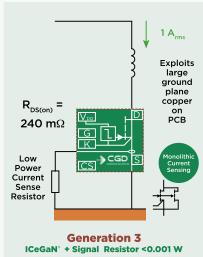


#### APPLICATION BRIEF

### Built-in Current Sense Function Significantly Reduces Device Temperature







#### **Evolution of the Power Switch and Current Sense** in a 65 W Off-line Flyback

#### ICeGaN®: MAXIMISED ROBUSTNESS AND HIGHEST EFFICIENCY

	10%	25%	50%	75%	100%
CGD 90 Vrms	90.6	92.0	92.6	92.6	92.1
CGD 115 Vrms	90.6	92.4	93.1	93.3	93.2
CGD 230 Vrms	87.0	90.6	91.6	92.5	93.1
CGD 264 Vrms	85.2	89.6	90.1	91.5	92.3

## Dare to innovate differently













