

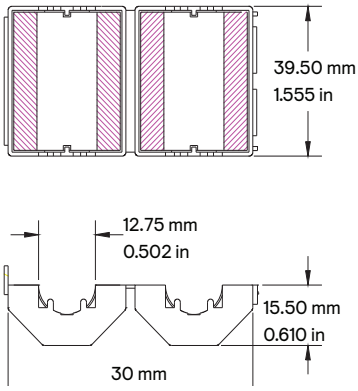
Gapped Ferrite

Enphase Systems utilizes Power Line Communication (PLC) technology, employing a 110 kHz signal on AC lines, for communication between IQ Series Microinverters and the IQ Gateway. This allows for remote monitoring and control. PLC operates on existing wiring, simplifying installation. However, certain appliances can introduce noise into the AC lines, disrupting the PLC signal. The Gapped Ferrite is a passive component that improves PLC reliability by isolating circuits carrying the Enphase PLC signal from those with noise-generating devices. Layers of tape are intentionally added to the Gapped Ferrite to stabilize the inductance of the core across a wider range of current. This enhances the reliability of communication and mitigates the impact of equipment that can suppress PLC signals.

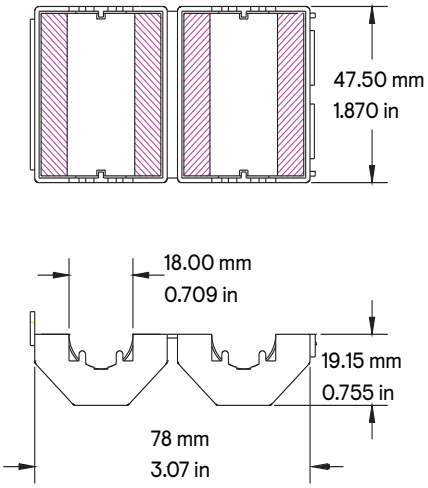
IQ-FERR-030 and IQ-FERR-065

MODEL NUMBER	IQ-FERR-030	IQ-FERR-065
Description	Gapped Ferrite 30 A, suitable for use with IQ7, and IQ8 Series Microinverters	Gapped Ferrite 65 A, suitable for use with IQ7, and IQ8 Series Microinverters
SPECIFICATIONS	**IQ-FERR-030**	**IQ-FERR-065**
Maximum current	30 A	65 A
Maximum voltage	250 VAC + 10%	
Dimensions	37.5 mm × 29,5 mm × 28.5 mm (1.48" × 1.16" × 1.12")	47.5 mm × 39 mm × 38.3 mm (1.87" × 1.54" × 1.51")
RoHS	RoHS Directive 2015/863/EU	
Case Material	Polypropylene-V0	

IQ-FERR-030



IQ-FERR-065



Revision history

REVISION	DATE	DESCRIPTION
DSH-00521-2.0	July 2025	Internal update.
DSH-00521-1.0	January 2025	Initial release.