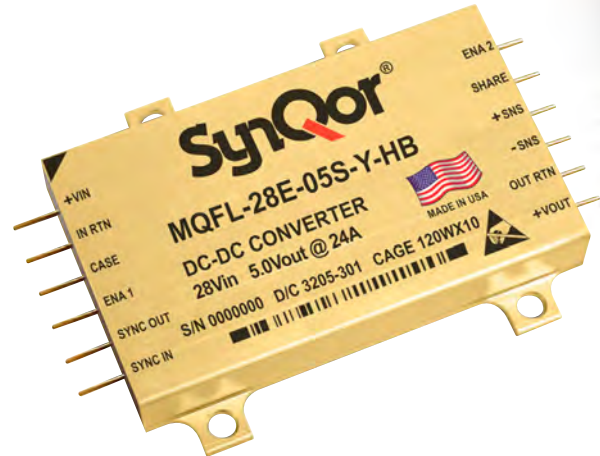


SynQor Products and MIL-STD-461 Compliance

To better serve our customer's needs when designing with our power converters for compliance with MIL-STD-461, SynQor has performed testing with the following Hi-Rel, MCOTS, and InQor product(s). We can verify that our solutions meet or exceed the requirements of each subsection as listed below. Though testing was explicitly done with only 5V output product, results are guaranteed to extend to the other output voltages of each family.



Hi-Rel - MQME-28-P (or -T) combined with MQFL-28-05S under a 120W resistive load
Hi-Rel – MQHE-28-P combined with MQHL-28-05S under a 50W resistive load
Hi-Rel – MQME-270-P combined with MQFL-270-05S under a 120W resistive load

	-461C Requirement	Most Stringent Limit Tested	-461D/E Requirement	Most Stringent Limit Tested
Conducted Emissions	CE01 CE03 ¹ CE07	Class A5 (Submarine) Class A5 (Submarine) Class A1 (Aircraft)	CE101 CE102	Submarine Basic Curve
Conducted Susceptibility	CS01 CS02	Class A5 (Submarine) Class A5 (Submarine)	CS101 CS114 CS115 CS116	Curve #2 Curve #5 Basic Waveform I _{MAX} = 10A
	CS06	Class A1/A5 (Aircraft/Sub)		
	CS10 CS11	Class A5 (Submarine) Class A5 (Submarine)		
	RE01 RE02 ²	Class A5 (Submarine) Class A5 (Submarine)		
Radiated Susceptibility	RS01 RS02 RS03	Class A5 (Submarine) Class A1/A5 (Aircraft/Sub) Class A4 (Surface Ship)	RS101 RS103	Army Aircraft External
<i>Met by any MQ Filter</i>		<i>Met by an MQ Filter having the Transient Suppression Feature</i>		

¹ For MQFL-270, converter and filter meet A1 limit of High Frequency Broadband Conducted Emissions and A5 limit of Narrowband Conducted Emissions

² For MQFL-28, met with a metal screen shield covering the filter, converter, and resistive load

Hi-Rel results are applicable to all output voltages of the MQFL-270, MQFL-28, MQFL-28E, MQFL-28V, and MQFL-28VE families. MQHL-28 and MQHL-28E product tested only to limits listed for MIL-STD-461E and without radiated susceptibility testing.



Application Note
MIL-STD-461

Application Note

SynQor Products and MIL-STD-461 Compliance

Mil-COTS and InQor

All 28V_{IN}, 5V_{OUT} encased converters combined with an encased, quarter-brick passive filter. Applicable to Half-Brick Peta, Quarter-Brick Tera and Sixteenth-Brick Mega families under full resistive load.

	-461D/E Requirement	Most Stringent Limit Tested
Conducted Emissions	CE101 CE102	Submarine Basic Curve
Conducted Susceptibility	CS101 CS114 CS115 CS116	Curve #2 Curve #5 Basic Waveform I _{MAX} = 10A
Radiated Emissions	RE101 RE102*	Navy Fixed Wing Internal, >25 meters Nose-to-Tail

*Met with common-mode capacitors and a metal screen shield covering the filter, converter and resistive load

MCOTS and InQor results are applicable to all product with the following exceptions: MCOTS-270 and IQ4H input ranges, HZ and HE series.



Please contact the factory for details regarding test procedures and detailed results.