

Q & H SERIES DC/DC MODULES

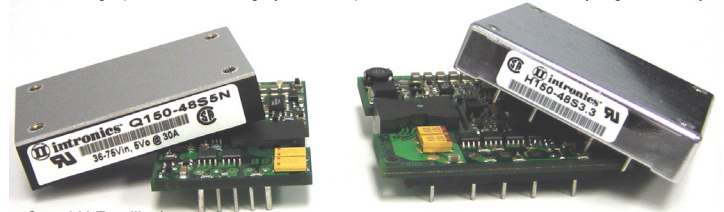
Applications

- Servers, Switches and Data Storage
- Wireless Communications
- Distributed Power Architecture
- Semiconductor Test Equipment
- Networking Gear
- Data Communications
- Telecommunications
- Industrial / Medical

The Q and H Families of high power, high density DC/DC converters offer power levels of up to 150 Watt in Industry-Standard Quarter-brick and Half-brick Pinouts. With a wide input voltage range and outputs, ranging from 1.5 to 24 Volts, these converters provide versatility without sacrificing the board space. All models feature an input filter, input undervoltage lockout, overtemperature protection, output current limiting and short circuit protection. Various packaging techniques offer versatility for multitude of applications and requirements. The use of patented design concepts facilitates maximum power delivered with the highest efficiency of up to 93%. All converters combine creative design practices with highly derated power devices to achieve very high reliability, high performance and low cost solution to systems designers.

Specifications & Features Summary

- No minimum load required
- -40°C to +85°C ambient operation
- Output adjustment +/-10% range
- 1500V, 10MΩ input-to-output isolation
- Unique Flat Transformer Technology
- Complimentary Circuits
- Over Temperature protection
- Output remote sense feature
- Input undervoltage lockout
- Output current limit and short circuit protection
- High power density up to 90W/inch³
- MTBF of up to 1,600,000 hours @ 50°C (Bellcore)
- Remote On/Off pin control (Negative Logic available)
- Meets Basic Insulation requirements of EN60950 (Open Frame Q and H Families)
- UL 60950 recognized, TUV EN60950 and CSA C22.2 No. 60950-00 Certified (Approvals Pending)
- Meets conducted limits of FCC Class B and CEI IEC61204-3 Class B with external filter



Approval Pending

Model	Input Voltage Range (Vin)	I in No Load	I in Full Load	Vo (V)	Io (A)	Eff Typ (%)	Case	Pinout	Regulation Line/Load (%)	Ripple/Noise Typ. (mVp-p)
Q150-48S1.5	36 - 75	0.100	1.80	1.5	45	85	Q150	QS	±0.2 / ±0.2	100
Q150-48S1.8	36 - 75	0.100	2.20	1.8	45	86	Q150	QS	±0.1 / ±0.1	100
Q150-48S2.5	36 - 75	0.100	2.80	2.5	40	87	Q150	QS	±0.1 / ±0.1	100
Q150-48S3.3	36 - 75	0.100	3.20	3.3	35	89	Q150	QS	±0.1 / ±0.1	100
Q150-48S5	36 - 75	0.100	4.00	5	30	91	Q150	QS	±0.1 / ±0.1	100
Q150-48S12	36 - 75	0.100	4.10	12	12	93	Q150	QS	±0.1 / ±0.1	100
H75-12S2.5	9 - 18	0.050	4.11	2.5	15.0	76	H	HS	±0.2 / ±0.2	75
H75-12S3.3	9 - 18	0.050	5.29	3.3	15.0	78	H	HS	±0.2 / ±0.2	75
H75-12S5	9 - 18	0.050	7.72	5	15.0	81	H	HS	±0.2 / ±0.2	75
H75-12S12	9 - 18	0.050	7.44	12	6.3	84	H	HS	±0.2 / ±0.2	100
H75-12S15	9 - 18	0.050	7.44	15	5.0	84	H	HS	±0.2 / ±0.2	100
H75-12S24	9 - 18	0.050	7.44	24	3.1	84	H	HS	±0.2 / ±0.2	240
H100-24S2.5	18 - 36	0.050	2.71	2.5	20.0	77	H	HS	±0.2 / ±0.2	50
H100-24S3.3	18 - 36	0.050	3.48	3.3	20.0	79	H	HS	±0.2 / ±0.2	50
H100-24S5	18 - 36	0.050	5.02	5	20.0	83	H	HS	±0.2 / ±0.2	50
H100-24S12	18 - 36	0.050	4.88	12	8.3	85	H	HS	±0.2 / ±0.2	100
H100-24S15	18 - 36	0.050	4.93	15	6.7	85	H	HS	±0.2 / ±0.2	100
H100-24S24	18 - 36	0.050	4.91	24	4.2	85	H	HS	±0.2 / ±0.2	100
H120-48S1.5	36 - 75	0.100	1.10	1.5	30.0	85	H120	HS	±1.0 / ±1.0	100
H120-48S1.8	36 - 75	0.100	1.30	1.8	30.0	86	H120	HS	±1.0 / ±1.0	100
H120-48S2.5	36 - 75	0.100	1.80	2.5	30.0	87	H120	HS	±1.0 / ±1.0	100
H120-48S3.3	36 - 75	0.100	3.10	3.3	40.0	87	H120	HS	±1.0 / ±1.0	100
H120-48S5	36 - 75	0.100	2.30	5	20.0	90	H120	HS	±1.0 / ±1.0	100
H120-48S12	36 - 75	0.100	2.20	12	10.0	92	H120	HS	±1.0 / ±1.0	100

NOTE: ADD SUFFIX "N" FOR NEGATIVE LOGIC VERSIONS Typical at Ta = +25 °C under nominal line voltage and 75% load conditions, unless noted. The information contained in this brief are believed to be accurate and reliable at the time of publication. Specifications are subject to change without notice. Refer to specification sheet for performance characteristics and application guidelines.

