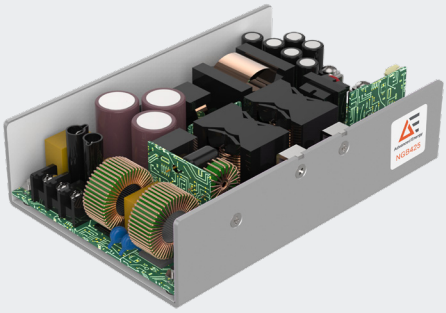
NGB425 SERIES

Application Note



Medical

Industrial

LED/AV

BENEFITS

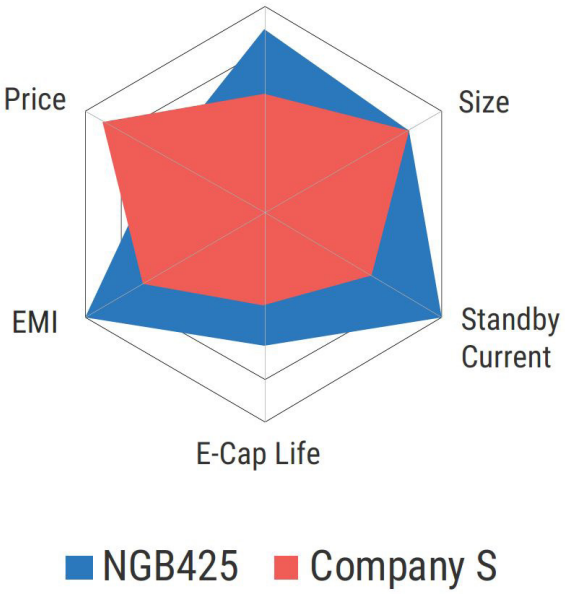
- 425 W of power in a compact 3.0” x 5.0” x 1.5”
- Universal input 85 to 264 VAC
- Enhanced EMI and EMC performance ensures easy integration into end equipment
- Will ride through unstable mains power fluctuation ensuring continuous operation
- Long operational life – use of only high-quality electrolytic capacitors

FEATURES

- 270 W convection rating in 3”x5” form factor
- Meets Class B EMI with 3 dB margin
- >10 years electrolytic capacitor life
- Universal 85 to 264 Vac Input Range for home healthcare applications
- -20°C to 80°C operating temperature range

COMPETITIVE POSITIONING

A bigger surface area means better performance and lower operating cost



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PLATFORMS

MEDICAL

- Operating Equipment
- Medical Lighting
- Lab, Dental, Hospital Equipment
- Clinical Chemistry Equipment
- Microbiology Equipment
- Drug Administration
- Hematology Instruments
- ICU Factory Automation
- Patient Monitoring

INDUSTRIAL - AV/LIGHTING

- Electronic Test
- Analytical Test
- Automatic Test Equipment
- Communications Test
- Automotive Test
- Process Control
- Factory Automation
- Refrigeration Controls

APPLICATIONS

MEDICAL

- LED for Heat Therapy
- Chemical Therapy Analyzer
- Sterilizer
- Mass Analyzers
- Dialysis Equipment
- Infusion Pump
- Cauterizer Device
- ICU Monitor System
- Pulse Oximeter
- Surgical Equipment
- Imaging

INDUSTRIAL

- Oscilloscopes
- Protocol Analyzers
- Power Meters
- Mobile Network
- Analyzers
- Chromatography
- Rheometers
- Gas Analyzers
- In-Circuit Board Testers
- Label Printers
- Laser Cutting
- Kiosks
- ATM, Gaming
- Sorting Machines

VALUE PROPOSITION

- Dual rated medical & industrial approved to AAMI ES/CSA C22.2/EN/IEC/UL60601-1 3rd Edition and IEC62368-1.
- Meet IEC60601-1-2 4th Edition EMC requirements and feature 2xMeans of Patient Protection (2xMOPP).
- Class B EMI compliance supports acceleration of home healthcare applications.
- Built-in protections against unstable operational environments minimize the need for implementing at the system level, resulting in shorter development time and reduced cost.
- Common mode noise is minimized, helping system designers reduce development efforts and parts cost by reducing the amount of additional filtering needed otherwise.
- AE local technical support capabilities provide real-time help in solving potential design problems which could otherwise cause revenue loss due to delays in product introduction.

ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than four decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

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