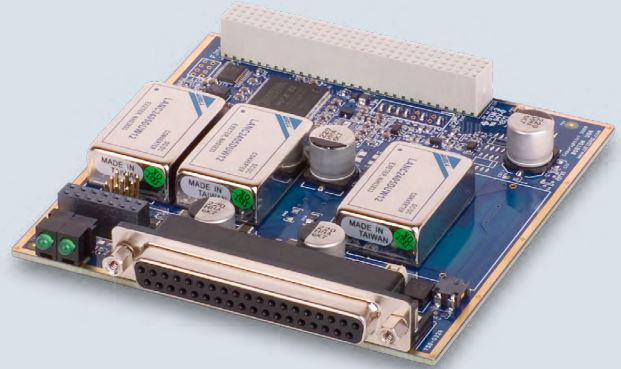![United Electronic Industries / AMETEK logo]

DNx-PC-911-828 28 VDC

Power Supply Output Boards

- **DNR-PC-911-828 series for RACKtangle chassis**
- **DNA-PC-911-828 series for CUBE chassis**
- **Isolated DC/DC converters**
- **Overload protection**
- **Overtemperature shutdown**
- **Software-controlled On/Off switch**
- **Readback of input voltage and current**

DNA-PC-911-828 shown (boards available in DNA, DNF and DNR configurations)

GENERAL DESCRIPTION

The DNA-PC-911-828 and DNR-PC-911-828 series provide external power to various sensors and signal conditioning when required by your application. The 91x series may also be used to provide power to the various DNx series I/O boards requiring external power. The DNA version is designed for use in UEI's Cube chassis, while the DNR series is for use in the RACKtangle chassis form factors.

The DNx-PC-911-828 provides 28 VDC. (For other voltages, please refer to the DNx-PC-910, 911, 912 and 913, which are designed to provide output voltages of ±10 VDC, ±15 VDC, +24 VDC and ±45 VDC respectively). Input power for the boards is provided by the internal

Cube or RACKtangle by default, but an external power supply* may be used to power the units. The units are designed to automatically detect the presence of an external supply and use power from it when available.

Outputs may be turned on and off under software control (default is On). The boards provide a read-back capability of the input voltage allowing the application to ensure acceptable input voltage levels.

All connections are through a 37-pin D female connetor. The pinout of this connector is identical to that of the earlier DNA-PC-90x series with the exception that pins designated as "NC" on the 90x series are now used as the

connections to external power when used. All the DNx-PC-91x boards share the same pinout.

Software is included, providing a comprehensive, yet easy-to-use API that supports all popular operating systems, including Windows, Linux, and most real-time operating systems—such as QNX, Intime, VXworks, and more. Additionally, the UEIDAQ Framework—an even higher level Windows driver—supplies complete support for those creating applications in many popular Windows programming languages, as well as data acquisition software packages such as LabVIEW and MATLAB/Simulink.

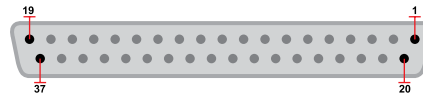## TECHNICAL SPECIFICATIONS (All version unless otherwise noted)

Input voltage	Uses the same 9–36 V DC as chassis in which it is installed
Output voltage	(Call for info on other voltages)
DNx-PC-911	+28 V DC ±3%
Output current*	(Derated 1.2% per °C above 40 °C)
DNx-PC-91-828	1.3 A
Output ripple voltage	<100 mV
Output enable/disable	Software controlled. Default condition is ON
Input Selection*	Power provided by internal bus or external connection. Default source is internal.
Input protection	5 A slow-blow fuse
Output protection	Short circuit protected, unlimited duration
Short circuit output current	150 % of I_{max}
Output Isolation	350 Vrms, min
Input voltage readback accuracy	±1%
Temerature measurment accuracy	±2 °C
Power supply efficiency	>75% at all currents
Power consumption	0.8W (without load)
Operating temperature range	-40 °C to +85 °C (output current derated 1.2% per °C above 40 °C)
Operating humidity	95%, non-condensing
MTBF (Hours)	150,000

* When the total power drawn from all DNx-PC-911-828 series boards in a single chassis exceeds 40 watts, the use of external power is recommended
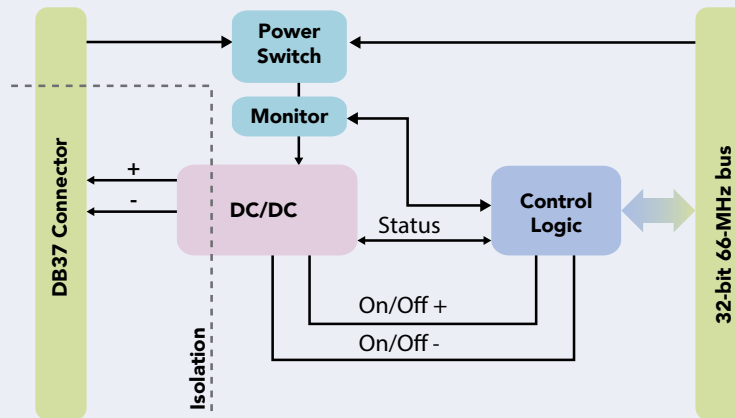
PINOUT DIAGRAMS

DB-37 (female)
37-pin connector:
DNx-PC-911

Ext PWR Ret	37	19	Ext PWR Ret
DGND	36	18	28 V
DGND	35	17	28 V
DGND	34	16	28 V
DGND	33	15	28 V
DGND	32	14	28 V
DGND	31	13	28 V
DGND	30	12	28 V
DGND	29	11	N/C
DGND	28	10	N/C
DGND	27	9	N/C
DGND	26	8	28 V
DGND	25	7	28 V
DGND	24	6	28 V
DGND	23	5	28 V
DGND	22	4	28 V
DGND	21	3	28 V
Ext PWR+	20	2	28 V
		1	Ext PWR+

BLOCK DIAGRAM

ORDERING GUIDE

Including SDK/Board Support Packages (Only one toolkit is required, regardless of the number of UEIPACs deployed)
To place an order, you can build an estimate online at www.ueidaq.com, or contact us at 508-921-4600 or uei.sales@ametek.com.

Part Number	Description
DNA-CBL-37S	3 ft., 37-way, male to female, round shielded cable
DNA-STP-37	Universal Screw Terminal Panel for DNx-series I/O
DNA-STP-37-DR	Universal Screw Terminal for DNx-series I/O with DIN rail mounts
Extended Warranty	Option to purchase UEI's extended 5 year warranty is available