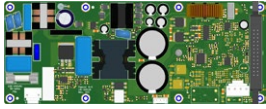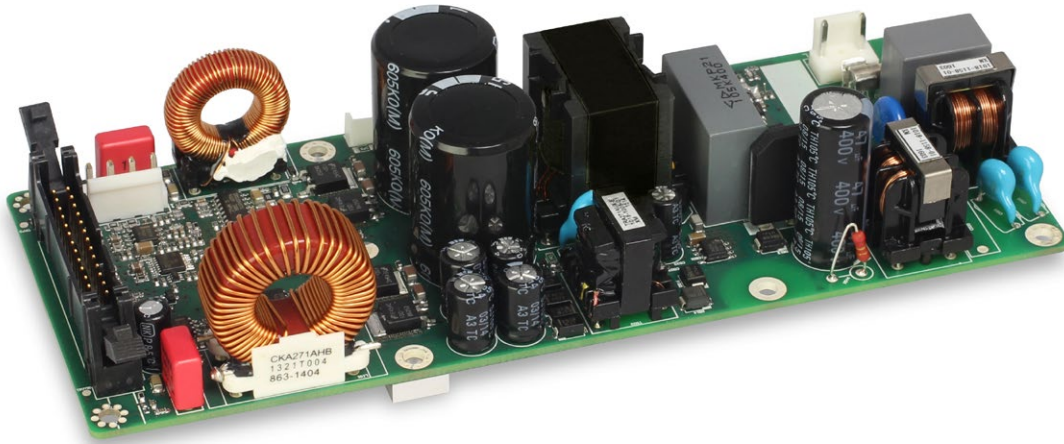# U-PRO Series Amplifier Module

U-PRO2
280 + 100 W RMS
1000 + 300 W Peak

U-PRO1
280 W RMS
1000 W Peak

Pascal U-PRO Series – an ultra-compact power platform, for 1 and 2-way applications, featuring extreme dynamic power ratings and integrated power supply with PFC.

Extreme Dynamic Power Ratings

The U-PRO series features unique dynamic power ratings, due to its extremely high voltage rails relative to its RMS power output. Resultantly, with LF channel RMS ratings of 280 W, it can deliver ultra-short bursts of 500 W RMS or 1000 W peak.

Unmatched Efficiency

Like the S & T-PRO Series, the U-PRO Series boasts the world's best system efficiency, minimizing the requirement for heat sinks and cooling. The cool operation also contributes to the amplifiers' long term reliability.

U-PRO2 Dedicated for 2 Way Speakers

The U-PRO2's asymmetrical power configuration, feature set and form factor uniquely optimize it as a dedicated power solution for self-powered 2-way loudspeakers.

Auxiliary Power & Readouts

Auxiliary power is available for DSP or analog I/O cards. Readouts of protect/mute, temperature and clip signals are accessible for DSP/Network or IO-boards. The U-PRO Series features ultra low standby power consumption for EuP2013 and green energy star compliance, with an Auto Standby/Wake-up feature with selectable time settings.

Audiophile Performance

Pascal's proprietary UMAC™ Class-D technology delivers unequalled audiophile specifications, including the highest dynamic range and the lowest distortion performance of any comparable pro audio amplifier. This makes the U-PRO series suitable for pro audio applications and for use in high-end Hi-Fi and AV products.

Interface compatible with S/T-PRO2

The U-PRO Series features compatible pin interfacing and identical output voltages to the higher current capable, popular S-PRO and T-PRO modules; thus the front-end electronics of both the S-PRO, T-PRO and U-PRO Series are plug-and-play compatible.
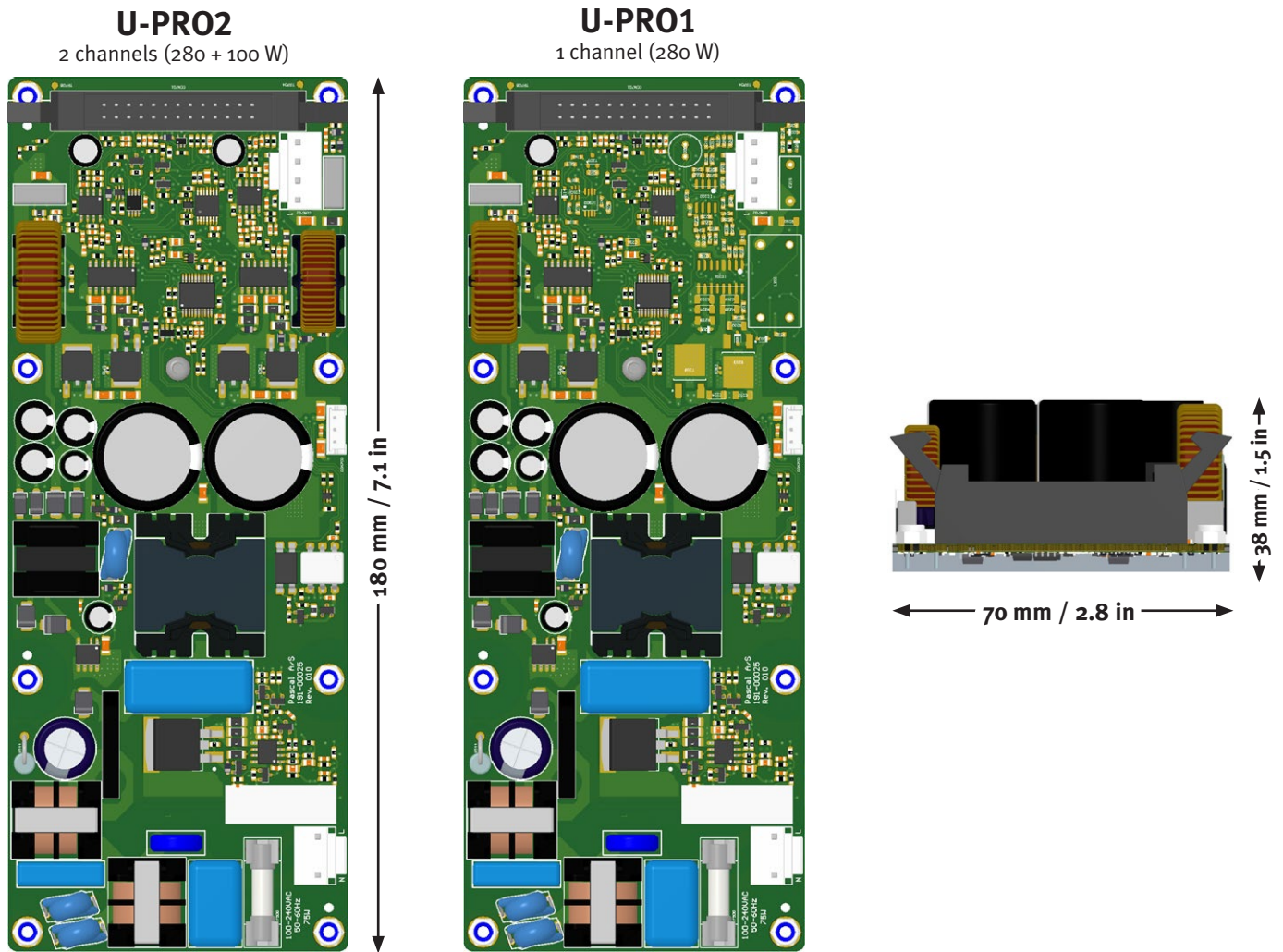
Universal Mains & PFC

Pascal's UREC™ PFC (Power Factor Correction) power supply technology enables universal AC mains operation, eliminating the need for local market specific power regulation products and susceptibility to related reliability issues. The power supply delivers consistent, regulated power worldwide.

Safety Approved - EMC Compliant

Pascal amplifier modules are safety approved and verified for EMC compliance. CB report and UL certificates are available for easy market approval.

Specifications:

U-PRO2
2 channels (280 + 100 W)

U-PRO1
1 channel (280 W)

180 mm / 7.1 in

38 mm / 1.5 in

70 mm / 2.8 in

Power Ratings (RMS @ 1% THD @ 230Vac)

	16 Ω	8 Ω	4 Ω	Peak
Channel 1	125 W	245 W	280 W	1000 W @ 4 Ω
Channel 2 (U-PRO2 only)	125 W	175 W	110 W	300 W @ 8 Ω

Output Circuitry	UMAC™ Class D - full bandwith PWM modulator with ultra low distortion
Output Voltage	70 V_p / 140 V_{pp} (unloaded)
Amplifier Gain	26 dB
Signal To Noise-Ratio	> 119 dB (A-weighted, 20 Hz - 20 kHz, 8 Ω load)
THD+N (typical)	< 0.05 % (20 Hz - 20 kHz, 8 Ω load, 3 dB below rated power)
Frequency Response	20 Hz - 20 kHz (+0/-0.25 dB (8 Ω load, 3 dB below rated power)
Damping Factor	> 350, channel 1 / > 225, channel 2 (8 Ω load, 1 kHz and below)
Protection Circuits	Short circuit protection, DC protection, under voltage protection, temperature protection, overload protection
Readouts & Control options	Protect/Disable (mute), Temperature, Clip, Voltage, Auto Standby/Wake-up (3 timings)
Power Supply	UREC™ universal mains switch mode power supply with Power Factor Correction (PFC) and integral standby converter
Operation Voltage	Universal Mains, 85-265V
Aux. Power for DSP	±15 V, +7.5 V, maximum total 9 watt available
Standby Consumption	< 0.25 W (Green Energy Star & ErP 1275/2008/EC compliant)
Dimensions	38 x 70 x 180 mm / 1.5 x 2.5 x 7.0 in
Weight	U-PRO1: 220g / 0.49 lbs - U-PRO2: 229g / 0.50 lbs

All specifications are typical values