



Telephone Ring Generators

State-of-the-Art Technology for Cutting-Edge Systems

Through core expertise in the design, manufacture and integration of digitally controlled switching power supply technology, PowerDsine™ has established itself as the leading provider of low-cost, high performance power components for telecom applications.

PowerDsine telephone ring generator modules are based on proprietary technology, which converts low DC voltage into the high AC voltage required to generate ringing signals for all analog line telecom systems. Innovative topologies enable the synthesizing of a low distortion sine wave in a single stage conversion, thereby increasing efficiency while reducing internal component count and unit size. The PowerDsine ring generator line includes plug-and-play modules for 1 to 30 Watt output power that are suitable for ringing systems of 2 to 300 POTS lines.

Unique Features

PowerDsine ring generators feature unique controls and reporting signals and have a wide-input DC voltage range making them more versatile and simple to integrate than other solutions. All of our products are built for convection cooling, do not require heat sink and include sophisticated Overload protection, short circuit protection and turn on/off at zero voltage as standard.

Other standard features include digital inhibit control, digital output frequency selection for supporting multiple international destinations and compliance with UL, CUL and TUV standards.

Reducing Your Cost and Time to Market

Programmable output frequency and amplitude allow you to meet all of your international destinations with a single cost-effective line card design.

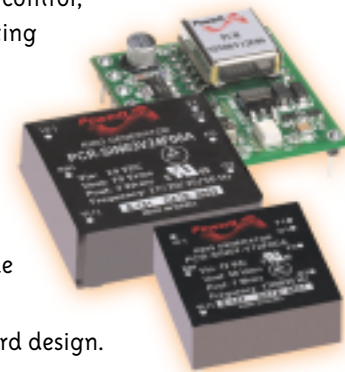
By selecting plug-and-play modules over discrete component solutions, you can reduce your component count and increase overall reliability. In addition, advanced overload protection increases your overall system performance. PowerDsine's proven and tested modules are easy to integrate, and require only a single standard DC voltage to operate. By meeting telecom safety standards, PowerDsine simplifies your system approval process which allows you to significantly reduce design and production costs, time-to-market and logistics. In essence, PowerDsine allows you to better focus on your core technologies.

Features

- Easy To Integrate 1 to 30 Watt Sine Wave Telephone Ring Generator Modules
- Adjustable Output between 45-86Vrms
- Advanced Overload Protection Featuring a Proprietary Constant Output Power Algorithm
- Selectable Digital Output Ringing Frequencies of 17, 20, 25, 50Hz. Additional frequencies are available.
- Single Standard DC Supply of 12, 24, or 48Vdc
- Digital On/Off Cadence Control with Soft Start
- Low Distortion (THD≤5%) Sine Wave Ringing Signal
- Zero Crossing Synchronization
- Input Under/Over Voltage Protection
- Input to Output Isolation
- UL 1950, EN60950, CSA 22.2-950 Approved
- Compact Package Design

Applications

- PBX, PABX and Key Systems
- Digital Loop Carriers
- CTI Cards and IP Telephony Gateways
- Wireless Local Loop Systems
- Rural Telephony Systems and Fixed Cellular Systems
- Satellite Telephone and VSAT Terminals
- Pair Gain Systems
- Short/Long Loop POTS Applications





PowerDsine is a global leader in the design and manufacturing of high-performance, off-the-shelf DSP controlled switching power supply solutions for telecom OEM manufacturers. PowerDsine also offers ASIC controllers, a full line of xDSL remote power feeding DC/DC modules and Wireless Local Loop Integrated Telecom Power Supplies. PowerDsine sells through a worldwide network of distributors and sales representatives throughout North America, Europe, Asia and the Far East.

For a full product catalog, application notes, pricing and availability, please contact:

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www.powerdsine.com

Selection Guide

Ring Generator Series	Output			REN*	Output Frequency [Hz]			Input Voltage [Vdc]			Control		Mechanical Dimensions [mm]	Pinout
	Power [VA]	Waveform	Voltage [Vrms]		17	20	25	50	12	24	48	Selectable Frequency		
PCR-SIN01A	1	Sine	50Vrms	3	✓	✓	✓		✓	✓		✓	29x29x11.5	7 Pin
PCR-SIN01-F50A	1	Sine	50Vrms	3				✓	✓	✓		✓	29x29x11.5	5 Pin
PCR-SIN03B	3	Sine	70Vrms	5	✓	✓	✓	✓	✓	✓	✓	✓	39x39x14.5	7 Pin
PCR-SIN06	4	Sine	45-86Vrms Adjustable	4-12	✓	✓	✓	✓	✓	✓	✓	✓	41x41x12.7	10 Pin
PCR-SIN15	15	Sine	45-100Vrms Adjustable	15-40	✓	✓	✓	✓		✓	✓	✓	63.5x63.5x12.7	12 Pin
PC-R302-925	30	Sine	45-86Vrms Adjustable	30-100	✓	✓	✓	✓		✓	✓	✓	138x64.5x12.7	12 Pin

* Calculations are based on the North American REN = 6930w resistance in series with 8mF capacitance.

Typical Ring Generator Application

