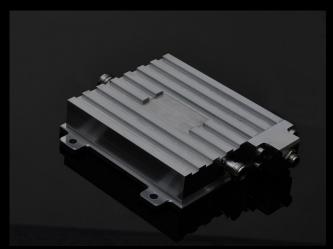


# Pure Signals 10, 15, 20 and 30dB series of In Line Pre Amplifiers



The Pure Signals series of 10db, 15dB, 20dB and 30dB pre amplifiers are all indoor or outdoor rated for use in the 824 to 1990MHz frequency range. They will find special use in boosting 800 and 1900Mhz band cellular frequencies.

The housing is water tight and is made from high grade machined aluminum.

The connectors at either end are N type.

The pre amplifier will help reduce the effects of noise and interference while at the same time boosting the signal through the cable to the antenna by as much as 30dB and with no negative effect on the signal to noise ratio (SNR).

The Pure Signals series of pre amps can be used in a wide range of applications such as including it as part of the system design for building Distributed Antenna Systems (DAS) where the in line amplifier can be used in place of a more expensive additional signal booster.

The Pure Signals series of in line pre amps is proudly manufactured in Canada to the highest design and component standards.

- Boosts low level signal.
- Maintains quality signal to noise.
- Reduces installation costs by eliminating the need for additional high priced cellular boosters.
- Transparent to the quality of the existing signal.
- Accepts higher signal levels without distorting the output.
- Plug and play, no knobs or complicated set up required.
- Allows indoor building areas with weak or dead spot signals to have full cellular service
- Enhances cell phone reception throughout large buildings such as in hospitals, medical centers and governmental buildings
- Supports 800 MHz and 1900 MHz cellular service.
- Maximum Power output +20dBm
- Maximum input signal 0dBm
- Gain range 10db, 15dB, 20dB and 30dB
- Power: 120 VAC wall adapter (optional)

12—24 VDC via coax

- Low power requirements 5 watts
- Extreme temperature capability / -45° to +55° Celsius
- Waterproof.
- Small footprint.
- Lightweight (1Kg, 2.2lbs)
- 1 Year Warranty

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#### **APPLICATIONS**

Some cellular boosters have insufficient signal gain and/or signal loss from long coax resulting in poor performance in areas of low signal levels. A Puresignals inline antenna preamplifier will greatly improve the performance and sensitivity of your repeater/booster.

#### **Distributed Antenna System (DAS)**

In building DAS systems usually result in excessive long coax lengths. This causes considerable signal loss and poor performance. To overcome the performance loss some designers will install larger power amplifiers and larger diameter coax.

A lower cost alternative is to install a Puresignals low noise inline amplifiers in the DAS design. Inline low noise amplifiers will improve the signal to noise levels, removes the need to install larger Power Amplifiers, reduces signal reflections generated from long coax feeds, and reduces the requirement to increase the coax diameter. Pure signals pre-amplifiers in a DAS system will improve performance and signal sensitivity without degrading signal quality.

### **Technical Specifications**

#### 800/1900 MHz

Frequency Range:	824 - 849 Megahertz Up-link,
	869 – 894 Megahertz Down Link
	1850-1910 Megahertz Up-link
	1930 – 1990 Megahertz Down Link
<b>Maximum Output Power:</b>	+20 dBm
Maximum Input Signal:	0dBm
Gain:	
PS-10	10dB
PS-15	15dB
PS-20	20dB
PS-30	30dB
RF Connectors:	50 $\Omega$ N Type, water proof
Water Proof:	IP68 Outdoor Rated
Power Supply (AC):	120 VAC wall adapter (optional)
Power Supply (DC):	12—24 VDC via coax
Power Consumption:	5 Watts
<b>Operating Temperature:</b>	-45°C - +55°C
Unit Size:	5.27" x 5.78"x 1.25" 13.4 x 14.67 x 3.17 cm
Weight:	2.2 lbs, 1 kg Typical
<b>Enclosure Type:</b>	IP67, Aluminum
Warranty:	1 Year
Input signal bypass mode when the input level exceeds 0dBm.	

For more information:

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