



Proteus™ is a digital signal processor conditioning the wireless receive uplink RF path. This produces an RF signal free of unwanted co-channel and adjacent RF power. Proteus with PurePass™ signal processing helps operators ensure the cleanest signal, limited to the desired bandwidth, is passed to the base station even in the most difficult environments.

Proteus Features

Carrier Select Conditioning isolates the desired carriers and passes them to the base station, while greatly reducing adjacent channel power at the receiver/radio

- Protects carriers from adjacent channel signals
- Minimizes unnecessary power entering the band
- Change frequency bands as needed

Adaptive Interference Mitigation ("AIM") eliminates the corruption caused by narrow band interference, passing an RF signal free of interference

- Reduces noise rise
- Removes GSM and other rapidly occurring, highly dynamic interferers
- Recovers coverage, capacity and performance

User Defined Band Rejection activates software-defined band-reject filters through a simple user interface

- Through PurePass signal processing, a specified bandwidth is substantially removed to minimize the effects of the targeted RF power
- User chooses center frequency and bandwidth of filters
- Adds extra isolation and selectivity

SpectrumView Plus analysis tool provides visibility into the condition of the spectrum and logs interference activity

With growing demand for capacity due to increasing data traffic, call volumes and complexity of calls, most wireless carriers are hitting the limits of their allotted spectrum. Proteus maximizes spectrum utilization by using PurePass RF digital signal processing to ensure full use of existing carriers, permit more carriers and, ultimately, allow more calls and data throughput.

Proteus new applications:

- **Support more carriers in existing spectrum**
Immediately increase capacity
- **Reduce interference from adjacent air-to-ground and specialized mobile radio traffic**
Protect and condition carriers
- **Optimize performance at special events**
Maximize capacity and protect quality
- **Improve coverage and capacity in coastal and dense urban areas**
Complete more calls
- **Mitigate cross-border, GSM and rapidly occurring, highly dynamic interference**
Eliminate spectrum intrusions, maintaining maximum network performance

Proteus with PurePass passes a clean signal, making base stations work better.



Increasing the Value of Our Customers' Wireless Networks

Proteus™ RF Digital Signal Processing

with PurePass™

Specifications

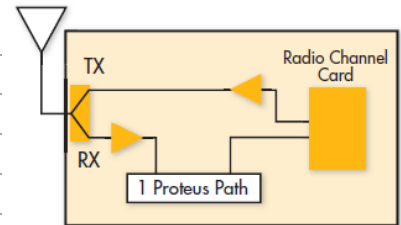


RF Performance

Bandwidth	25 MHz
Gain variation (over full bandwidth)	< +/- 2dB
Max input power	> -25 dBm
Minimum detectable signal	< -100 dBm/30 kHz
Dynamic range	> 75 dB
Adaptation time	< 200 μ s (typ)
AIM interference rejection (CW)	> 40 dB

Mechanical/Power/Interface/Storage

Dimensions (inches)	3.5 H x 19 W x 17 D
Mounting	19" or 23" Rack
Weight	15 lbs
Operating temperature	-35° to 50° C
Humidity	5% to 95%
Connector	N-type female
Local User Interface (configuration, data visualization)	QVGA touch screen
Remote User Interface	Via Web Browser
Data Interfaces	Ethernet, USB 2.0
Cooling	Unforced convection
Alarms	Dry contact, SNMP capable
Supply Voltage	+27 or -48 VDC
Power Consumption	90 Watts



Typical Proteus Configuration



All specifications subject to change without notice.
Please contact ISCO International for complete performance data.

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