PCS-300
Radar Simulator

Buffalo Computer Graphics, Inc. (BCG) continues its advancement in radar simulation with the addition of the PCS-300 Radar Simulator. Supporting an expanded list of features from its predecessor PCS-200, the PCS-300 offers a higher level of hardware integration and more emphasis on software generated radar imagery. The heart of the PCS-300 is BCG's Radar Signal Generator Express Board (RSGe). This new hardware module moves to a PCI-Express platform utilizing a smaller board footprint than before. This single slot module allows BCG more flexibility for packaging the PCS-300 within 1U rack mount chassis or an small portable unit. The reduced parts count of the PCS-300 increases system reliability while reducing the cost of the unit. The PCS-300 delivers a full range of antenna signals and a realistic radar presentation for a wide variety of radar displays.

The PCS-300 may also be integrated with ECDIS or commercial electronic charting systems to provide radar overlay capability. As with all BCG radar simulators, multiple units may be networked together to allow students to operate in an interactive team training environment. The PCS-300 remains compatible with existing BCG systems and with integrated bridge visual trainers.

The PCS-300 is also available as a hardware / software kit installed in a customer's computer (Model PCS-301), as a small portable system when size and transportability are required (Model PCS-350), or in a dual antenna configuration for S-Band / X-Band systems (Model PCS-320). Each model offers the same signal fidelity and functionality to the user. Contact BCG for more information on any of the PCS-3xx models.

The PCS-3xx simulator family can be delivered with Windows 7 or Windows 10 operating system support.

PCS-3xx Specifications:

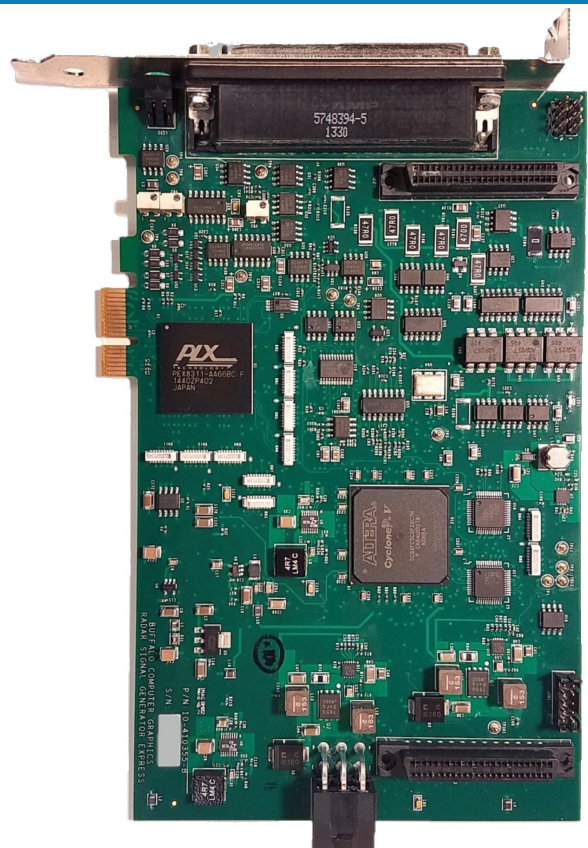All simulation parameters are programmable based on customer's needs which include;

- PRF: 50-5000Hz
- Scan Rate: 5—60 RPM
- Pulse Width: 50-5000 nSec
- Angular Resolution: 0.17 degrees
- Horizontal and Vertical Beam Width: 0.3-90 degrees
- Speed Log: 200 pulses / NM
- Gyro Compass: 30V, 3-phase stepper
- Video Resolution: 4-64 yards / pixel
- 100 targets, expandable to 1000
- Exercise Playing Area up to 256NM x 256NM
- Antenna blanking sectors
- Set & Drift
- Yaw

- RACON and SART generation
- Dynamic Precipitation Clutter
- Sea Clutter
- Secondary Radar Effects include:
  * Range Attenuation (Power)
  * False Echoes
  * Multiple Echoes
  * Radar Interface
  * Receiver Noise
  * Beam Width / Pulse Width Effects

Available Radar Display Interfaces:

* SPS-73, SPS-50, SPS-78
* Sperry VisionMaster / BridgeMaster-E
* Furuno: All Models
* Generic: Trigger, Video, ACP, ARP
* SSR Engineering PCRP, various models
* Custom Interfaces Upon Request

RSG-Express Board

PCS-300 driving a Sperry BridgeMaster E

Contact BCG for information and pricing on our full line of Maritime Simulation products.

4185 Bayview Road ~ Blasdell ~ New York ~ 14219 ~ 716-822-8668 ~ www.bcgeng.com