

Piranha Genus Standard BUC DC/10MHz injector

selectable 24V

BUC DC power inserter module (Bias-T) to fit Genus 1U chassis series. Provides selectable 24VDC to BUCs or similar and RF power in monitoring. 10MHz injection onto port 1 is switchable on/off when fitted to Genus chassis with 10MHz card fitted. Full control and monitoring of the module is possible locally through the parent chassis HMI (if fitted), or remotely via Ethernet.

DC Inserter Module



DC Inserter Module

Compact form factor allowing multiple modules to be housed in the Genus chassis. Each module occupies 1 slot in the chassis.

Variable voltage

selectable 24V to BUCs

10MHz injection

onto port 1 is switchable on/off (when fitted with 10MHz option).

Hot Swap & replaceable

RF DC Inserter module

Chassis Options

Local control & monitoring

via HMI high resolution touchscreen

Resilience

from dual redundant hot-swap power supplies & field replaceable CPU & HMI

Compact indoor & outdoor

chassis options, which can be part populated

Secure protocols

with SNMPv3 and HTTPS

Flexible Module Configurations

choose from a mixture of DC inserter modules.

Remote control & monitoring

via RJ45 Ethernet port with SNMP & web browser interface

Field replaceable Internal 10MHz reference source

and external reference inject port with auto detection (optional)



Indoor Chassis



Outdoor Unit

PRN BUC DC Power Inserter Module - RF Parameters					
Model Numbers		PRN-G1S-BS2-003			
Size		1 slot wide			
Capacity		Single path			
Frequency Range		850-2450 MHz			
RF Connectors		50Ω SMA	50Ω BNC	75Ω BNC	75Ω F-type
Insertion Loss (dB)		<1.5dB across full band			
Flatness (dB)	Full band	±0.40 dB			
	Any 36MHz	±0.15 dB			
Return Loss (dB)	Typ.	17 dB			
	Min.	14 dB			
Isolation		80 dB min between any two modules			
BUC Voltage		Off. 24V. At port 1. Tolerance ±5% typ. Ripple: 0.75% Max			
BUC Load		2.8A Maximum. Overcurrent protection: Current limited trip and restart.			
10MHz		Switchable on/off to port 1 (see parent chassis for detailed specification)			
Input RF Power		+20dBm. Absolute total maximum			
Module DC Power		12 VDC. Dual redundant 12V bus, module hot swappable			
DC Consumption		95W Full Load. 3W No Load. Max consumption at a steady state.			
RF Power Detect		Range –40dBm to –10dBm total power across band. For indication only			
User Alarms		Via Chassis Ethernet/HMI/Web Interface (upper and lower limits user settable) BUC Current RF Power In			
Remote Control & Monitoring		This module provides monitoring and control via connection with parent chassis. See parent chassis spec for specific details.			
Local Control & Monitoring		Chassis LCD HMI front panel.			
Module Weight		0.18kg			
Module Dimensions		256mm x 45mm x 22mm maximum. PRN-G1x chassis or Genus 1U series mountable.			
Module Finish		Machined Aluminium			
MTBF		>250,000 hrs			
Spec Version		1.2			
Connector Options					
Connector Type		PRN-G1S-BS2-003-xxxx			
SMA 50 Ohm		PRN-G1S-BS2-003-S5S5			
BNC 50 Ohm		PRN-G1S-BS2-003-B5B5			
BNC 75 Ohm		PRN-G1S-BS2-003-B7B7			
F-Type 75 Ohm		PRN-G1S-BS2-003-F7F7			

Note 1: The specification is subject to regular reviews and will be updated from time to time as part of our continuing product development and improved spec accuracy.
Note 2: Operation beyond the quoted limits stated above may cause instantaneous and permanent damage.
Note 3: All specs are for 50 Ohm connectors unless detailed otherwise.