

Piranha Switchable 10MHz Inserter Module

for use with 10MHz distributing GENUS modular chassis

A 1U hot-swap, switchable ON/OFF 10MHz reference injector module for injecting a 10MHz reference signal onto an L-Band feed (850-2500 MHz). For use in the 1U GENUS chassis or ODU and supplied with 50 Ohm SMA connectors

10MHz Inserter Module



10MHz inserter module

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

Hot swap & replaceable
10MHz inserter module

10MHz injection

onto port 1 is switchable on/off

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



RF Parameters		
Size		1 slot wide
Capacity		Single path
Frequency Range		850-2500 MHz
Input & Ouput Ports		50Ω SMA or BNC Input port (port1) – 10MHz Output port (port2) – DC blocked
RF Connectors		50Ω SMA50Ω BNC
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
10MHz		Switchable on/off to port 1
Input RF Power		+20dBm. Absolute total maximum
Module DC Power		12 VDC. Dual redundant 12V bus, module hot swappable
DC Consumption		2W max. consumption at a steady state
RF Power Detect		Range –50dBm to –10dBm total power across band. For indication only
User Alarms		Via Chassis Ethernet/HMI/Web Interface, for indication only RF Power In
Remote Control & Monitoring		This module provides monitoring and control via connection with parent chassis. See parent chassis spec for specific details. 10MHz selection and alarms status monitoring.
Local Control & Monitoring		Chassis LCD HMI front panel (if fitted) and LED on module face at rear. For indication only.
Module Weight		0.18kg
Module Dimensions		175mm x 42mm x 20mm maximum. PRN-G1x chassis or Genus 1U series mountable.
Module Finish		Machined Aluminium
Spec Version		1.0
Environmental		
Operating Temperature		0 to 50°C
Storage Temperature		-20°C to +75°C
Location		Indoor use only
Humidity		20 to 90% non-condensing
Altitude		10,000ft AMSL

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.

Part number configurator: PRN-G1S-TS2-112-XXXX → S5S5 - SMA 50 ohm
B5B5 - BNC 50 ohm