

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 & Output Ports | 50Ω SMA or BNC Input port (port1) - 10MHz Output port (port2) - DC blocked | |
| RF Connectors | 50Ω SMA | |
| | 50Ω 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.