

iDirect iSCPC Concentrator

The iDirect iSCPC concentrator is a fully integrated, feature rich, system offering service providers a smart, economical way to handle SCPC-exclusive traffic and leverage the industry's leading NMS (Network Management System) at the same time.

The iSCPC concentrator is a compact, 10 or 20 slot chassis, fully integrated with the latest value-added features from iDirect. This, combined with the same industry-leading iVANTAGE™ NMS provides an ideal solution for the SCPC market.

Compact Design Brings Big Savings

The iSCPC chassis comes fully loaded with 10 or 20 SCPC line cards. This single, compact chassis configuration means nearly a 50% rack space savings from the start. Installing and activating new links is easy — there's never a need to connect additional cables or IP routers.

Fully Integrated, Advanced Features Built In

Everything you need is built-in, including additional functionality:

- ◆ Full QoS functionality for prioritization of critical applications, including the most flexible traffic prioritization
- ◆ Integrated TCP and Web acceleration for an all-around improved user experience and better bandwidth utilization
- ◆ Turbo Product Codes for the most efficient forward error correction. Increased coding gain and lower decoding delay than traditional FEC mean greater bandwidth savings.
- ◆ Full line card 1:N redundancy in the chassis reduces downtime and improves customer satisfaction

Greater Network Management and Control with the Proven iDirect iVANTAGE NMS

- ◆ Provides centralized network and capacity management tools
- ◆ Reap all the benefits of one-stop monitoring and control from anywhere
- ◆ Minimizes the need for additional operations or technical staff training
- ◆ Automated fault notification and diagnostics with real-time statistics for a richer source of the most current data



Features

- ◆ Data rates up to 16 Mbps per link
- ◆ High density, compact design with 45% rack space savings
- ◆ 1:N redundancy
- ◆ Bundled with industry-leading iVANTAGE™ NMS
- ◆ Simplified cabling

iDirect iSCPC Concentrator Model 15051



Network Configuration

SatCom Interfaces	5 TxIF Ports: Type-F, 950–1700 MHz 5 RxIF Ports: Type-F, 950–1700 MHz 5 independent, 4-to-1 L-Band combiner for Tx 5 independent, 4-to-1 L-Band divider for Rx
RF Power Range	Transmit: -43 dBm to -3 dBm (Rear Output Connector) Receive: -57 dBm to +5 dBm composite (Rear Output Connector)
Line Card Slots	20
Remote requirements Management	Works with iINFINITI 5000 or 7000 series remotes

Line Card Specifications

Model	Requires M1D1-iSCPC
Max. Combined IP Data Rate	Up to 20 Mbps per card
FEC	Turbo Product Codes 0.431, 0.533, 0.793, 0.879
Modulation Scheme	QPSK/BPSK/8PSK
Network Access Scheme	SCPC
LAN Protocols Supported	TCP, UDP, ICMP, IGMP, ARP, RIP v2, Static Routes, Web Acceleration, TCP Acceleration
LAN Interface	Category-5/5e/6 UTP/STP, 1000BASE-T Ethernet (IEEE 802.3ab). Maximum cabling distance is 328 feet (100 m)
Line Card Redundancy	1:N

Power Specifications

Input Voltage Range	100VAC -240 VAC single phase
Frequency	47Hz–63Hz
Current Consumption	At 100 VAC ≤8.0 Amps maximum, at 240 VAC ≤4.0 Amps maximum
Power Supply Redundancy	1+1 redundant Hot-swappable

Mechanical and Environmental

Dimensions	W 17.5 in x D 24.0 in x H 19.0 in
Weight	Empty: ~94 pounds (42.6 Kg) Loaded: ~122 pounds (55.3 Kg)
Operating Temperature	32°F to 113°F (0°C to 45°C), up to 90% non-condensing humidity
Operating Altitude	≤10,000 feet (3048m)
FAN Redundancy	2+1 Hot-swappable
Emission Standards	Complies with CFR 47 FCC Part 15 Class B, CISPR-22 Class B, ICES-003 Class B, EN 55022 Class B, EN 301-428, EN 301-443, EN 61000-3-2, EN 61000-3-3
Safety Standards	Complies with UL60950-1, CAN/CSA-C22.2 NO. 60950-1 -03, IEC/EN 60950-1
Immunity Standards	Complies with EN 301-489-1, EN 301-489-12, EN 55024, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-11