

Data Sheet

1FINITY™ C200 Series Communications Integrators

Operate multiple 1FINITY blades as a single node for simplified management and operations

1FINITY C200 Series Communications Integrators at a Glance

- Enables multiple 1FINITY Lambda or Transport series blades to operate as a single node
- Consolidates IP and SDN controller/DCN connections from up to 35 discrete 1FINITY blades into a single connection
- Automates turn-up provisioning
- Offers site configuration pre-planning
- Simplifies deployment of high-capacity ROADMs configurations

Product Overview

1FINITY blades can operate autonomously, since each has its own IP address and NETCONF/YANG port for connection to a SDN controller through the data communications network (DCN). The 1FINITY C200 Series Communications Integrator offer versatile options when a site has multiple 1FINITY Lambda and/or Transport blades, by enabling groups of these blades to share a single IP address and DCN connection.

Supporting Plug-and-Play Operation

This consolidation simplifies and automates site provisioning for plug-and-play operation. For example, whether the site configuration consists of a two- or eight-degree ROADM utilizing 1FINITY Lambda series blades, the C201 Communications Integrator can integrate these blades into a single logical node that presents one IP address to the SDN controller over a single DCN interconnect port. Similarly, all 1FINITY Transport blades connected to a C202 Communications Integrator can be managed as a single node in the same manner.

There are 48 service ports on the Communications Integrator blade. The first 12 ports are used for DCN interconnect, future cascading and redundancy. Each blade interconnect offers options for GbE, 10 GbE (future) or electrical connections. Of the remaining 36 ports, up to 35 allow for scaling 1FINITY Lambda or Transport blades, and one is used for optical time domain reflectometer (OTDR) interconnect.



Custom Configuration Options

1FINITY C200 Communications Integrators address network management and control needs depending on the network configuration:

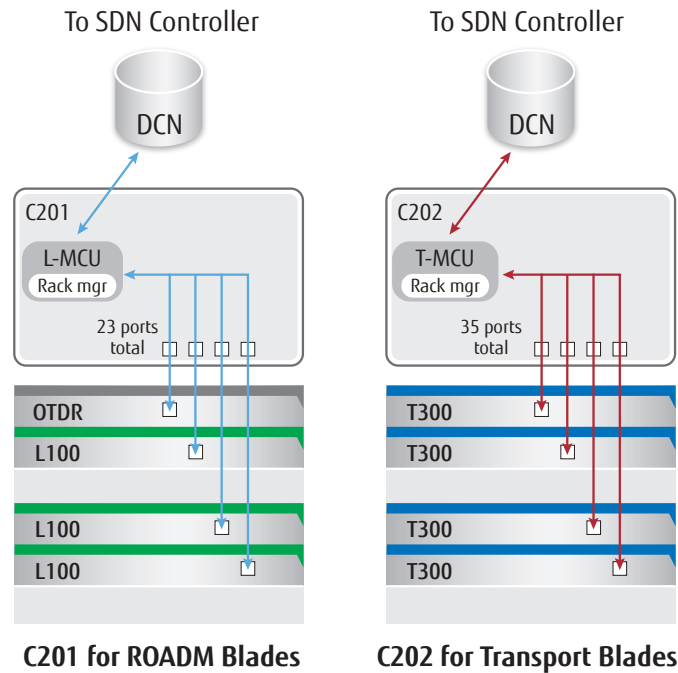
- **The C201** provides single IP and DCN control of up to 22 1FINITY L-series ROADM blades plus 1 connection for OTDR test head.
- **The C202** performs the same single-node IP and DCN control as the C201, except that it is deployed to control up to 35 1FINITY T-series Transport blades.

1FINITY: A Revolutionary, Disaggregated Platform

For network operators seeking an open, simple, scalable architecture to meet escalating bandwidth demand, Fujitsu provides 1FINITY, a revolutionary disaggregated platform that delivers unprecedented flexibility, scalability, and efficiency.

Unlike the traditional converged systems other vendors provide, the programmable, blade-centric design of 1FINITY offers a pay-as-you grow approach with low initial investment. Additional benefits include high rack space utilization, evergreen technology design, and operational convergence, as well as open pluggable optics, open APIs, and open protocols.

Simplified, Automated Connectivity



1FINITY C200 Series Communications Integrator Architecture

Improved Operational Efficiency

C200 Series units are configured using Rack Manager software. This software simplifies and automates configuration and turn-up in a disaggregated network environment. Installation automation is achieved via zero-touch provisioning within Rack Manager, allowing quick deployment in large-scale environments. Rack Manager provides the benefit of adding a blade to an existing 1FINITY system, in a similar manner to slotting a new card into a traditional chassis system.

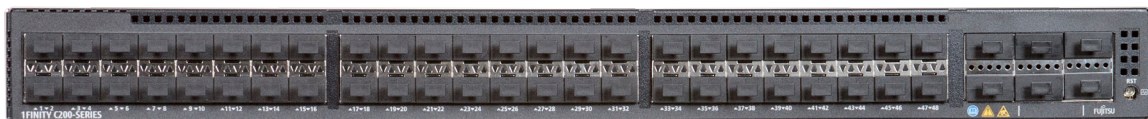
Site Pre-Planning

1FINITY Lambda and Transport blades can be pre-planned for provisioning at a site. Site pre-planning involves various parameters such as location, floor, aisle, rack and RU; in addition to logical system names. The automated provisioning process includes discovery of Communications Integrator shelf ID and port number, requesting and installation of an IP address from the DHCP server, as well as the Communications Integrator announcing itself to the SDN controller.

Installation engineers need only rack, stack and interconnect 1FINITY blades with the Communications Integrator. Once the 1FINITY blades are connected to the Communications Integrator, they auto-provision based on the preplanned instructions. Overall, this plug-and-play process cuts installation time and expense while eliminating complexity.

SDN Control Integration

The C201 and C202 integrate with Fujitsu Virtuora® NC and other SDN control platforms via open APIs using NETCONF/YANG. Consolidation of communication connections from multiple network elements at any given site to an open network controller streamlines operations and accelerates integration with operating systems.



Up to 12 DCN interconnect ports; up to 35 × SFP+ 1 GbE/10 GbE blade interconnect ports

Technical Specifications

Base System		Physical Characteristics	
System Configuration	1 RU blade, 48 × GbE	Physical Dimensions (H × W × D)	1.7" × 17.3" × 16" (43.18 × 440 × 406.4 mm)
Local Management Port (LMP)	100/1000 Mbps Ethernet RJ-45	Rack Compatibility	19" or 23"
Management Port (LCN)	1 × GbE SFP (T, SX, LX)	Weight	19 lbs (8.6 kg)
LEDs	System Status, Alarm Severity and Port	Operating Environment	
Fans	4 field-replaceable	Operating Temperature	0 to +50 °C
Power Supply	Dual-feed replaceable power modules	Operating Humidity	10% to 90%
Operating System	Linux	Power	
Service Ports		Power Supply	Dual-feed replaceable power modules
Total Service Ports per Blade	48	-48 V DC	-40 V DC to -57 V DC
1FINITY Blade Interconnect Ports	C201: 22 plus 1 for OTDR test head C202: 35	Power Consumption	142 W
Ports for SDN Controller or DCN Interconnect	12 (1, with 11 reserved for future functionality)	Regulatory and Compliance	
Optical/Electrical Interface	SFP+	FCC	FCC Part 15, Class A
Supported Interfaces	GbE SX, LX, RJ-45	NEBS	NEBS Level 3
Performance Monitoring		UL and CB Safety	UL 60950-1 and IEC 60950-1
Service PMS	24-hour and 15-minute untimed bins	CE	CE Mark
Thresholds and TCA	Support (user-assignable)	RoHS	RoHS
Management		ETSI	EN300-019, EN300-132, EN300-753, EN300-386
Virtuora NC	Yes	WEEE	WEEE
CLI	Yes	CDRH	FDA CDRH
NETCONF/YANG	Yes		
Communications	SSH, SFTP, FTP, Telnet		
OSMINE Support	CLEI		

Fujitsu Network Communications, Inc.

2801 Telecom Parkway, Richardson, TX 75082

Tel: 888.362.7763

us.fujitsu.com/telecom