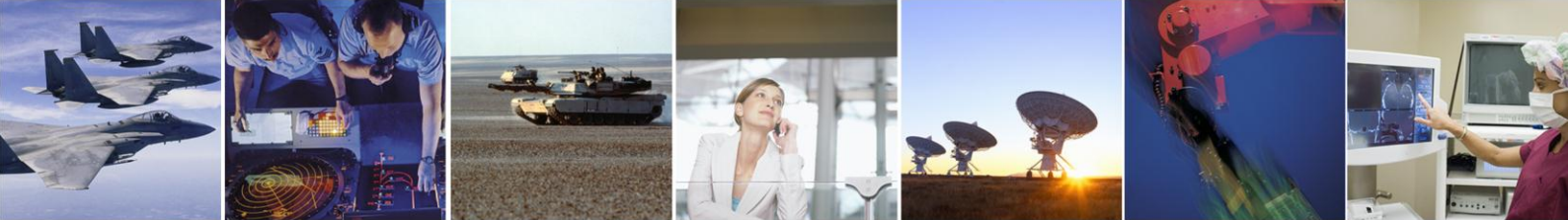




AdvancedTCA® CO14N-AC

14U, 14 slot Shelf with AC Power



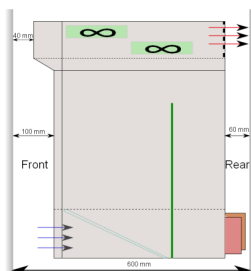
Front



Rear



Air Flow (Side)



Overview

This datasheet covers the New Comtel CO14N-AC, 14U, 14 slot 19" shelf, which is based on the original CO14N-DC shelf with integrated 1U power supply extension

Features

- 19" Rackmount 14U system
- 14 slot 8U front boards and RTM
- Full Mesh, Dual Star and Dual-Dual Star topologies available
- 40GBASE-KR4 and 10GBASE-KR/10GBASE-KR4
- Dual redundant Pigeon Point Shelf Manager
- 5 redundant (N+1) power supplies, 1600W each
- Pull cooling with 4 hot-swap redundant blowers
- High Reliability bussed IPMI to PSU's
- Fully PICMG 3.0 Rev 2.0 compatible
- Designed for compliance to NEBS and EN levels
- Air inlet filter with optimized air impedance



Benefits

- 8000W total power, 6400W redundant
- Power distribution more than 300W per slot
- Highly efficient packaging with up to 300W per slot cooling in an abbreviated 14U form factor
- RTM cooling up to 30W per slot
- High performance Backplane exceeds AdvancedTCA® specification
- CE and UL Safety Certifications

Accessories # Cdhjcbg

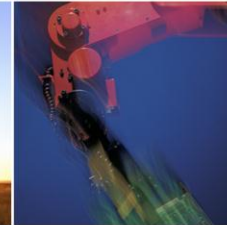
- Front- and Rear Cable Trays
- 23" Mounting Brackets
- Bezel for Front Air Inlet
- Custom Zone-3 backplanes available
- EMC and airflow filler modules available

Dimensions

Height	620.0mm	(14U)
Width	445.0mm	(with ears 485.6mm)
Depth	507.0mm	
Weight	47 kg	(with 5 PSU)
Colors:	Standard: Black powder painted	



Field Replaceable Units (FRU)



Blower



PEM



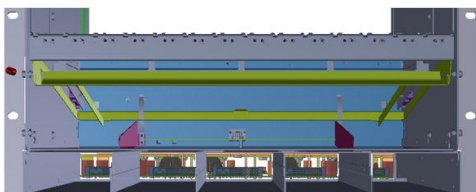
SHMC



FRU Data



Power Supply bay



Blowers

- Cooling direction bottom front to upper rear side
- Blowers speed setting by IPMC
- Fuses for each Blower Units
- T-Sensor for air outlet temperature measurement
- Cooling capability: up to 300Watts/slot
- Communication by IPMC

PEM

- Built-in PEM for protection and power distribution
- Shared current split into 8 power backplane segments over Circuit Breakers (4xA-Channel and 4xB-Channel)
- No need for service due to Circuit Breakers
- Optionally PEM Monitoring FRU (continuously monitors Circuit Breakers state)

Shelf Management Controller

- Pigeon Point Systems IPM Sentry Shmm500
- Fully hot swappable
- PMBus support over private I²C Bus
- PMBus interface available on the backplane connector and front panel
- Remote upgrade capability
- RMCP interface and SNMP interface

FRU Data Board

- FRU data board to carry the Shelf FRU data information
- Assembly option for TELCO Alarm function (Relays contacts, Alarm indication LEDs)
- Telco indication in front of the shelf over additional board
- Communication by IPMC

Power supply bay

- Provisions for 5 PS modules in 19" shelf
- No external wiring, only AC power cords
- Individual AC inlet for each module
- Up to 5000W redundant (4+1)
- Built-in locking mechanism and service handle
- Single PMBus shared among power supplies and two shelf managers

Power supplies

- High Efficiency 1600W Modules
- Internal ORing MOSFET & Current Share
- PM Bus capable
- Presence, AC Failure, Power OK are monitored on hw-signals on power connector (not PMBus sensors)