Compact Shelf
Versatile 2 Height Units Chassis

for ULAF+ access platform

- Small footprint, ideal for street shelter applications
- 3 slot / 2 heights units
- 19" and ETSI rack compatible
- Desktop option
- Flexible deployment configurations
- Redundant, temperature controlled fans
- Extends ULAF+ line card temperature range to 70° C
- Redundant fused power supply inputs
- Synchronization in- and output
- Alarm in- and outputs

Product Overview

The ULAF+ Compact Shelf is a versatile chassis for space and temperature critical applications. It can be used in central offices and at customer premises and can hosts any two ULAF+ line cards in managed applications or any three line cards in CPE or unmanaged applications.

The Compact Shelf is designed for indoor sites and outdoor cabinets. Its compact size and its variety of mounting options is the ideal solution for transport and concentration of bonded SHDSL and fiber based access services.

This Compact Shelf provides all the flexibility of the well established ULAF+ family and its future proof architecture protects your investment.

albis technologies

Features

With the temperature and redundant FAN Unit the operating temperature range of all ULAF+ cards is extended to 70° C meeting the requirements of street cabinets applications and non temperature controlled environments.

The redundant power feeding, the alarm in- / outputs (dry contacts) and the synchronization interface fulfill the requirements of all access networks as well as mobile and DSLAM backhaul applications.

The ULAF+ Compact Shelf can be configured to host a management card (MCU, MCU-S or MCU-CES) and two ULAF+ line cards or alternatively three ULAF+ line cards. It can installed in 19" or ETSI racks or used as desktop. Moreover wall mounting is an option to provide an appropriate solution in every application.
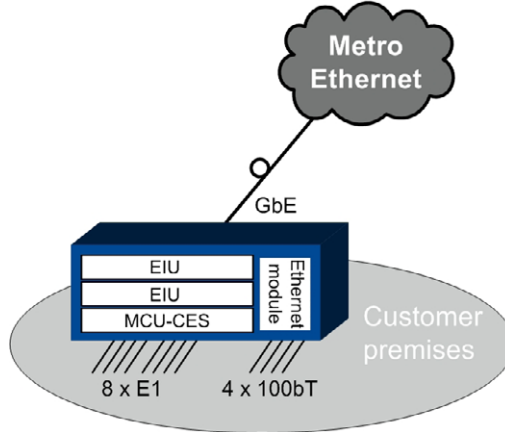
Applications

The ULAF+ Compact Shelf allows you to use all ULAF+ line cards and all the MCU derivates enabling a wide variety of applications such as:

- All ULAF+ legacy Ethernet and TDM applications
- Circuit Emulation Services
- EFM-Applications up to 12 wire pairs
- Remote power feeding and repeater support
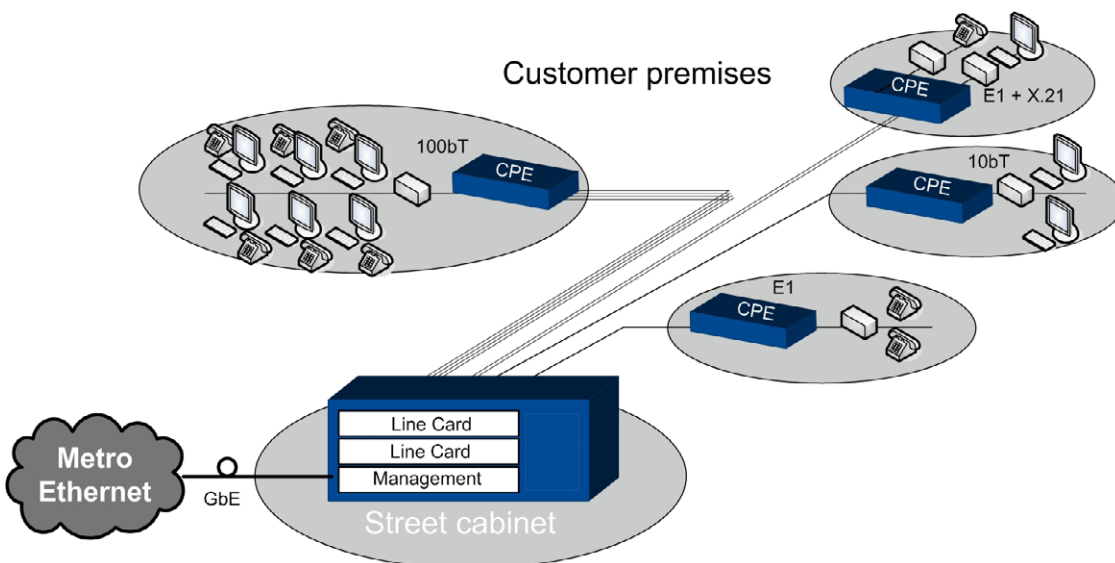- Management access (SNMP, TCP) to the network termination

Managed Application

If equipped with an MCU management card, the Compact Shelf can host any two ULAF+ line cards serving up to 8 customer.
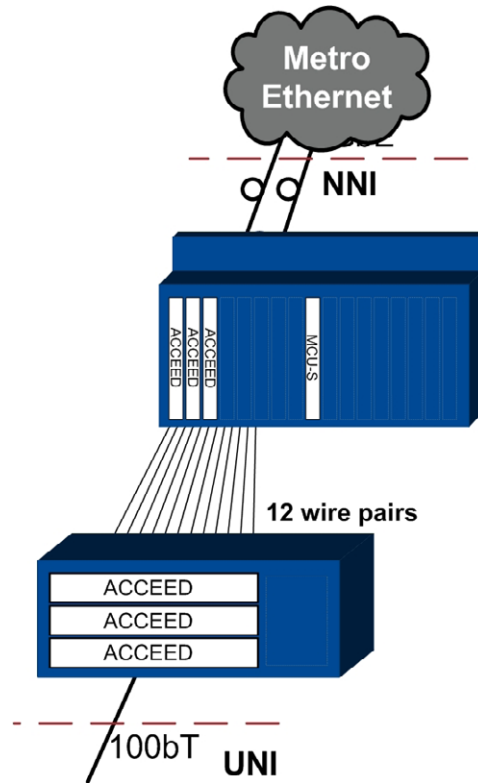

Mobile Backhaul Application

To provide Ethernet and TDM services over packet based networks, as frequently required for mobile backhaul, the Compact Shelf equipped with MCU-CES offers up to eight emulated E1 interfaces. An Ethernet Interface Module is available to provide additional four 100Mbit/s Ethernet interfaces as an option.
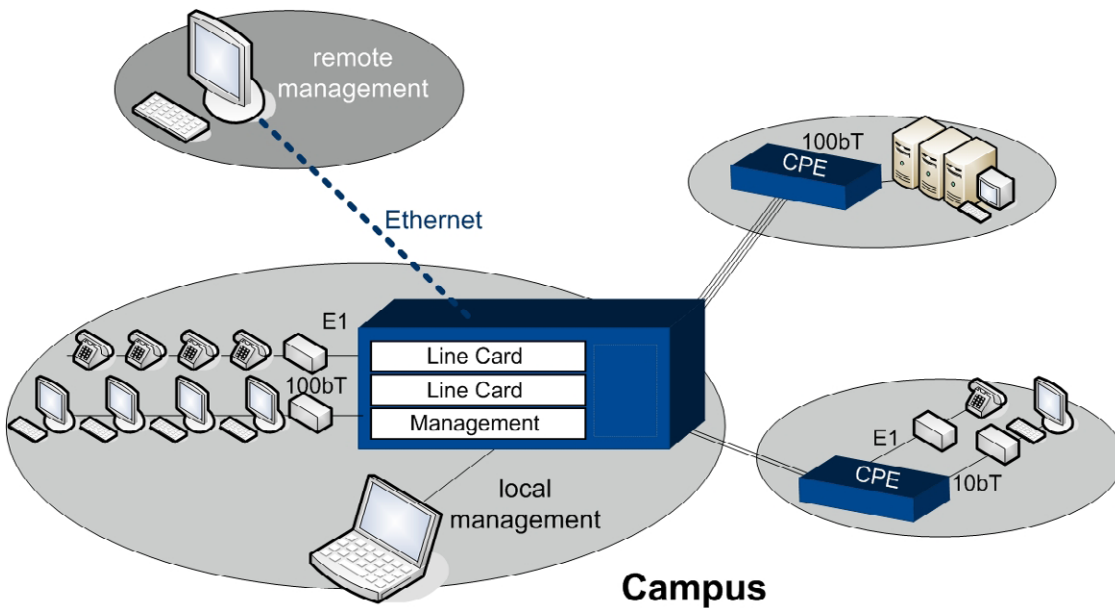
Bonded EFM Application

Equipped with ACCEED line cards, the ULAF+ Compact Shelf is a platform to implement a broad variety of crucial applications in the promising field of Carrier Ethernet. Up to 12 wire pairs can be bonded per Compact Shelf to provide a high speed Ethernet link.
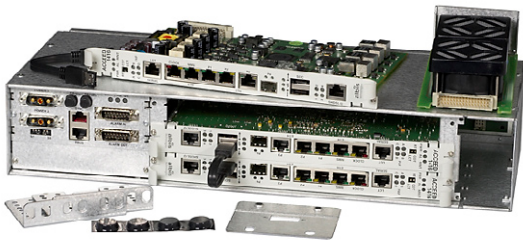
For EFM-applications requiring remote power feeding from the CPE (for instance access lines with more than 4 repeater stages), the ULAF+ Compact Shelf can be equipped with ACCEED units with integrated Remote Power Supply (RPS).

Campus Application

Equipped with MCU/MCU-S/MCU-CES management card, the ULAF+ Compact Shelf allows remote management access to stand-alone campus applications.

Ordering information

- Compact Shelf 2HU   S3105-B621-A211

Accessories

- Ethernet Module   S3118-J693-A1
  4x 100Base-T Adapter to access MCU-S/
  MCU-CES traffic switch

- Power Brick 80 W   V4415-Z37-X5
  (100 – 240 V_{AC} to 48 V_{DC})
  Mains adapter for applications with power
  consumption <80 W

- Power Brick 220 W   V4415-Z37-X8
  (100 – 240 V_{AC} to 48 V_{DC})
  Mains adapter for applications with power
  consumption >80 W

- RJ45 to BNC adapter C195-A336-A45
  BNC adapter for 75 Ohn unbalanced synchro-
  nizations interface

Technical data

Dimensions

Height (2HU)	88 mm
Width (without brackets)	439 mm
Width (with brackets)	483 mm
Depth	197 mm
Compatible with 19" and ETSI racks	

Supported Plug-in Units

Management & Concentrator Units	MCU, MCU-S, MCU-CEs
SHDSL Line Cards	QSTU, BSTU, BSTU4, STU, STU2, STU4
EFM Line Cards	ACCEED 1416
Optical Line Cards	BOTU, QOTU, OTU
Interface Cards	EIU, GTU, GTU4
	4x 100 Mbit/s Ethernet Module

Interfaces

DC Power	40 – 72 V_{DC}
	2x Sub-D 3W3 (redundant)
Reference Clock	
Input	75/120 Ohm 2048 kHz
	ITU-T G.703, RJ45
Output	75/120 Ohm 2048 kHz
	ITU-T G.703, RJ45
Alarm Interface	
Input (4x)	Sub-D15
Output (4x Dry Contacts)	Sub-D15
RBUS (to cascade ULAF+ shelves)	RJ45

Power Consumption

Own consumption	<5 W
Max. connected wattage	160 W
Max. power dissipation	100 W

Operating Temperature

Standard temperature range	-5° C ... +55° C
Extended temperature range	-15° C ... +70° C

Safety

EN 60950-1 (2006)

EMC/EMF

EN 300386 V1.4.1 (2008)
ES 201 468 V1.3.1 (2005)
ITU-T K.20/K.21 (2003)
ITU-T K.45 (2003)
EN 300 132-1/2 V2.1.2 (2003)
EN 50371 (2002)

00191001