



CPRIAdvisor CAP-100 / CAE-100

CPRIAdvisor Probe and Expansion Modules Specifications

Introduction

Viavi CPRIAdvisor is the optimal spectrum monitoring system for mobile operators, NEMs, and contractors performing radio access network (RAN) maintenance such as interference analysis and PIM detection. CPRIAdvisor enables users to dramatically improve operational efficiency by automatically diagnosing the root cause of problems in the RAN.

CPRIAdvisor adapts to any type of cell site, from a macro-cell with multiple bands and sectors, capable of performing RF over fiber (RToFiber) monitoring of up to 16 fiber links, to distributed antenna systems or centralized radio access network (C-RAN) topologies with hundreds of sectors, capable of performing RToFiber monitoring of up to 576 fiber links.

CPRIAdvisor comprises three main elements: CPRIAdvisor probe (CAP-100), CPRIAdvisor expansion module (CAE-100), and CPRIAdvisor manager (CAM-100)

The following diagram is a front view of the CAP-100 and CAE-100. CPRIAdvisor probe (CAP-100) can control up to 16 expansion modules (CAE-100) to expand the measurement port density to up to 576 fiber ports.

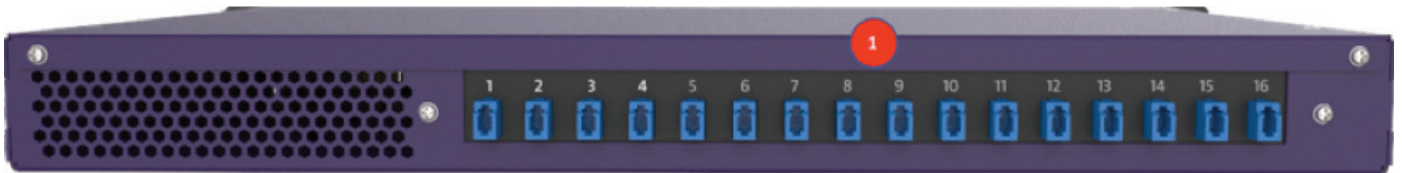


| Item | Name | Description |
|------|------------|---|
| 1 | Reset | Hard reset key of CPRIAdvisor probe |
| 2 | Ext Ctrl | Port to control expansion modules |
| 3 | Serial | Serial port to enable maintenance setup |
| 4 | LAN | Ethernet port to enable network connectivity to CPRIAdvisor manager |
| 5 | USB Client | Serial port to enable direct connectivity to CPRIAdvisor manager |
| 6 | USB Host | Serial port to enable external memory storage |
| 7 | Status | Indicator showing the operational status of the CPRIAdvisor probe |
| 8 | ⊕ | Ground connection for frame ground |
| 9 | Power | DC power connector |
| 10 | ⏻ | Power switch CPRIAdvisor's probe |



| Item | Name | Description |
|------|----------|--|
| 1 | Reset | Hard reset key of CPRIAdvisor probe |
| 2 | Ctrl Out | Port to communicate with CPRIAdvisor expansion modules |
| 3 | Ctrl In | Port to communicate with CPRIAdvisor probe or expansion module |
| 4 | ID No | Identifier for the CPRIAdvisor expansion module |
| 5 | Service | Port to enable maintenance for CPRIAdvisor expansion module |
| 6 | Reset | Hard reset key of CPRIAdvisor expansion module |
| 7 | ⊕ | Ground connection for frame ground |

The following diagram is a rear view of the CAP-100 and CAE-100.



| Item | Name | Description |
|------|---------|---|
| 1 | 1 to 16 | Optical LC ports of CPRIAdvisor probe for RFoFiber links under test |



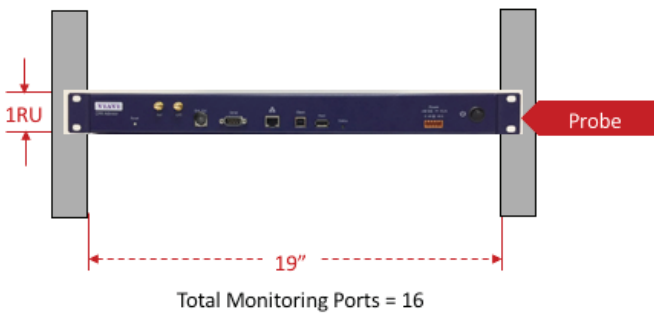
| Item | Name | Description |
|------|---------|--|
| 1 | COM | Optical LC port common output of the expansion module |
| 2 | 1 to 36 | Optical LC ports of CPRIAdvisor expansion module for RFoFiber links under test |

The following diagram illustrates an example of CPRIAdvisor manager (CAM-100).

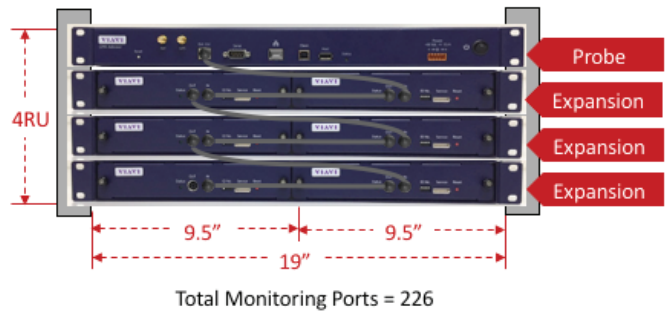
CPRIAdvisor Manager



CPRIAdvisor for Macro-Cells



CPRIAdvisor for C-RAN



Features and Specifications

Highlights and capabilities

- Offers high visibility of RF spectrum anytime and anywhere
- Significantly reduces maintenance costs
- Improves quality of mobile services
- Proactively detects internal or external RF interference

General specifications

CPRIAdvisor probe (CAP-100) specifications

| Items | | Description |
|----------------------------------|--|---------------------------------------|
| Mechanical | Height | 1 rack unit (RU) |
| | Width | 434 mm (17.1 in) |
| | Depth | 341.5 mm (13.5 in) |
| | Weight | 3.1 kg (6.9 lbs.) |
| Optical Input power range | | -24 to -4dBm |
| CPRI Link Rate | | Up to 4.9 Gbps (9.8 Gbps upgradeable) |
| OBSAI Link Rate | | Up to 3.1 Gbps (6.1 Gbps upgradeable) |
| IO Interface | Optical Input | 16 LC ports |
| | USB Host Port | Type A |
| | USB client Port | Type B |
| | LAN Interface | 1 RJ45 connectors for 10/100 Mbit/s |
| | Serial | 1 DSUB-9 port |
| | Bi-Color LED | Device Status display |
| | Reset Button | 1 |
| | Expansion Control port | DIN type, Daisy Chain |
| | 10MHz Ref. Input | Frequency reference |
| | GSP Ant | Frequency reference |
| Power Supply | Input Voltage | -48 V |
| | Power consumption | 72 Watt |
| Environmental | Operating | 0°C to 40°C |
| | Storage | -20°C to 60°C |
| | Humidity | 5% to 95% without condensation |
| | EMI/ESD | CE Compliant - Class A (EN61326) |
| | | CISPR11 IEC/EN 61000-4-2 |
| | Safety(LVD) | EN 61010-1 |
| | TUV-NRTL | UL61010-1:2012 |
| | | CAN/CSA C22.2 No. 61010-1:2012 |
| | Vibration | 5-500-5Hz, 1mm amplitude, 1G |
| | Shock | 15G, half-sine, 11ms, 6 axes |
| Inflammability | The Probe's metallic housing does not propagate fire | |

CPRIAdvisor expansion module (CAE-100) specifications

| Items | | Description |
|----------------------|--|---|
| Mechanical | Height | 1 rack unit (RU) |
| | Width | 210 mm (8.3 in) |
| | Depth | 340 mm (13.4 in) |
| | Weight | 1 kg (2.2 lbs.) |
| IO Interface | Optical Input | 36 LC ports |
| | Optical Output | 1 LC port |
| | Status LED | Device Status display |
| | Reset Button | 1 |
| | Control port | 1 DIN connector for slave link 1 DIN connector for master link |
| | DIP Switch | Expansion module identifier |
| Environmental | Operating | 0°C to 40°C (operating, temperature range) |
| | Storage | -20°C to 60°C |
| | Humidity | 5% to 95% without condensation |
| | EMI/ESD | CE Compliant - Class A (EN61326) |
| | | CISPR11 |
| | | IEC/EN 61000-4-2 |
| | Safety(LVD) | EN 61010-1 |
| | TUV-NRTL | UL61010-1:2012 |
| | | CAN/CSA C22.2 No. 61010-1:2012 |
| | Vibration | 5-500-5Hz, 1mm amplitude, 1G |
| Shock | 15G, half-sine, 11ms, 6 axes | |
| Inflammability | The Probe's metallic housing does not propagate fire | |

Optional Accessories

| Items | Description |
|------------------|---|
| CAP-0200 | 19-inch 1U Shelf for CPRIAdvisor Expansion |
| CAP-0210 | 16x LC to MPO 1.5m cable with MPO adapter panel |
| CAP-0220 | 36x LC to MOP 1.5m cable with MPO adapter panel |
| THDOC24 | High-Density Optical TAP Chassis |
| THDOT-SM-LC-55-K | 10 Gb Optical nTAP Module, SM, LC, 50/50 |
| THDOT-SM-LC-64-K | 10 Gb Optical nTAP Module, SM, LC, 60/40 |
| THDOT-SM-LC-73-K | 10 Gb Optical nTAP Module, SM, LC, 70/30 |



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