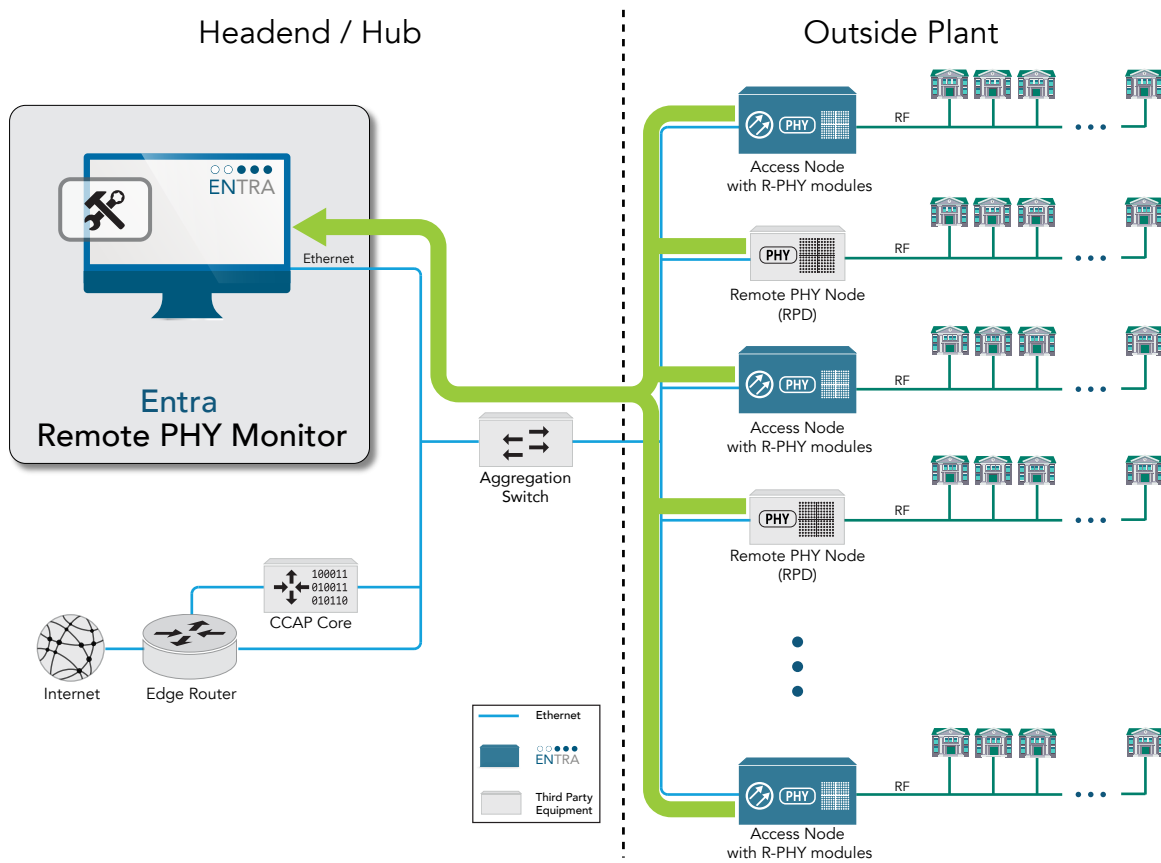


The **Entra** Distributed Access Platform is Vecima's realization of next generation Hybrid Fiber Coax. The Entra Ethernet-based Access Node supports multiple access architectures: Remote PHY, Remote MACPHY, Ethernet Switching, and PON. The Access Nodes are further empowered when paired with the Entra intelligent monitoring and configuration platform: the **Entra Remote PHY Monitor**.

Entra combines the newest technology and operational improvements in an environmentally-hardened Ethernet-first Access Node. In addition, interoperability with CCAP cores from other vendors is an integral part of Vecima's evolution of Entra.



Entra Remote PHY Monitor

## Improvement is not possible without Measurement

Vecima's **Entra Remote PHY Monitor** collects, stores, and presents RPD configuration and operational data in a simplified, clear, and consistent way providing MSOs with actionable insight into their RPD deployments. Consolidating RPD monitoring capabilities into a vendor-agnostic system empowers our customers to have smooth DAA rollouts, reduce operational expenses, and ensure their HFC network is operating at peak capacity.

The Entra Remote PHY Monitor acts as an Auxiliary CCAP Core and constantly communicates with deployed RPDs to ensure the most recent RPD-centric status and configuration information is presented to users.

The Entra Remote PHY Monitor provides a web-based GUI with rich tables and visualizations for users to monitor, investigate, and understand the access network from the point of view of their RPDs.

## Entra Remote PHY Monitor - Features

- Monitor status and configuration of Entra R-PHY Access Nodes (Entra RPDs) and third-party RPDs\*
- Rich Web Interface
- Monitor key real-time RPD metrics
- Understand recent events with metric timeline views
- Ensure proper configuration and operation of RPDs
- Detailed information on RF configuration, tunnel status, PTP status, RF Amplifiers\*\*, and more

\* Any standards-compliant RPD

\*\* Entra R-PHY Access Node (Entra RPD) only feature

## Entra Remote PHY Monitor - Specifications

Interfaces		Centralized Management	
<b>Console</b>	CLI over SSH (Administration & Remote Support)	<b>Performance</b>	Time-series metrics, streaming telemetry
<b>Web Interface</b>	Responsive Single Page Application, Accessible on desktop/laptop devices	<b>Security</b>	External authentication, authorization levels
<b>Node/RPD Polling</b>	Integrated Auxiliary CCAP Core (MHA v2) communicating via GCP/RCP TLVs	<b>Managed Devices</b>	Entra R-PHY Access Nodes (Entra RPDs), third-party RPDs*
<b>User Management</b>		<b>Firmware**</b>	Initiate upgrades, schedule upgrades, inventory versions
<b>Authentication Integration</b>	TACACS+	<b>Monitor</b>	Node health, RF configuration, RF Amplifiers**, PTP status, L2TPv3 tunnels, and Ethernet ports
<b>Authorization Levels</b>	Two account levels	<b>Data Storage</b>	Supports up to 500 active Nodes/RPDs, retains data from up to 1,000 Nodes/RPDs
<b>Deployment</b>		* Any standards-compliant RPD	
<b>Pre-configured Appliance</b>	1RU rack mount server	** Entra R-PHY Access Node (Entra RPD) only feature	