

Communications service providers (CSPs) have a generational opportunity to mount sustainable approaches to bridging the digital divide in unserved and underserved markets by utilizing broadband initiative funding such as the Broadband Equity, Access and Deployment (BEAD) Program to open the door to multi-gigabit, low latency services.

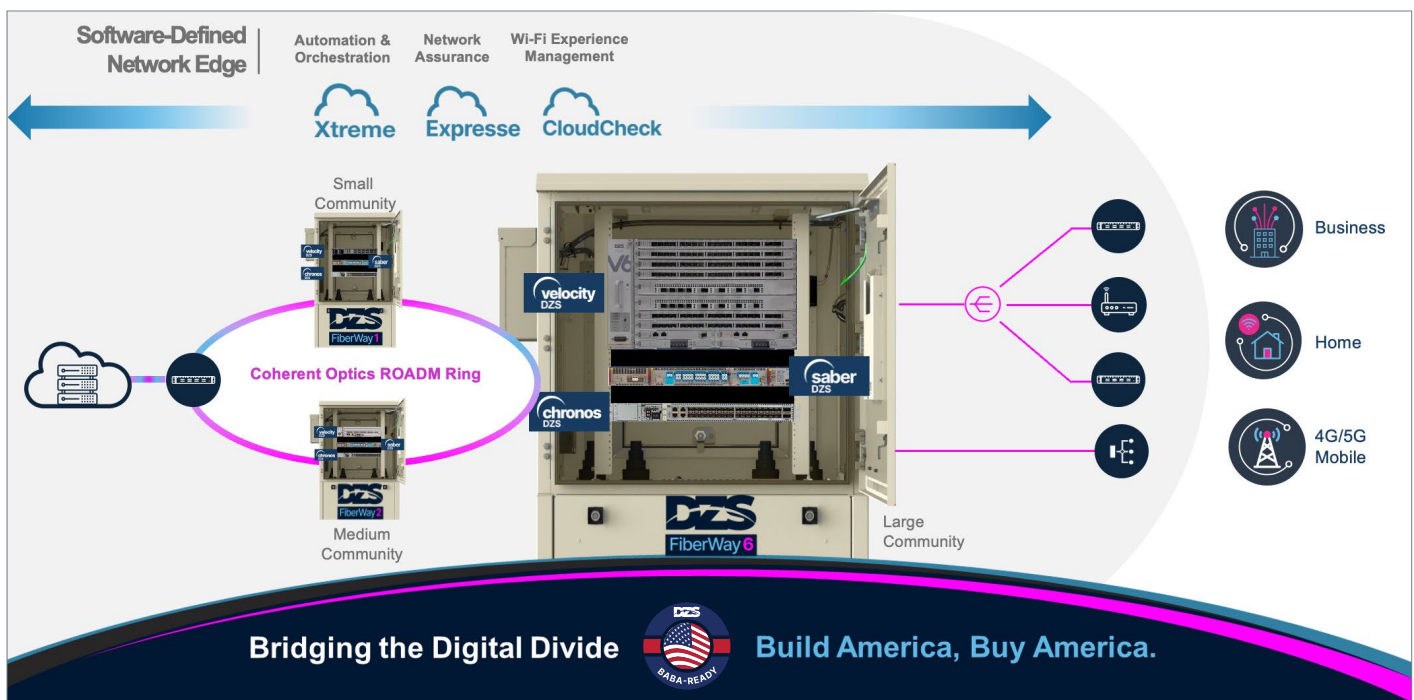
Technology breakthroughs encased in the new environmentally hardened [DZS FiberWay](#) platform can help accelerate these programs with unprecedented economics by addressing Last-Mile, Middle-Mile and Remote Management in one solution:

- **Last-Mile:** Scalable, compact, climate resilient, and ultra-high capacity PON optical line terminal (OLT) systems
- **Middle-Mile:** nx100/400Gbps hardened optical transport platforms featuring reconfigurable optical add-drop multiplexer (ROADM) capability and a converged routing solution for 4G/5G wireless xHaul
- **Management:** AI-driven experience management, service and network assurance, and automation and orchestration software for efficient and agile remote management of the broadband service and applications.

DZS FiberWay can be positioned at even the most remote network edge to deliver multi-gigabit, low latency service that can serve GPON and XGS-PON today and upgrade to next generation technologies like 50G PON in-place. And, by utilizing coherent optical ring, mesh, and point-to-point connectivity supported by the DZS Saber 4400 transport system, CSPs can immediately serve multiple end-user clusters and single points of high-volume usage such as anchor institutions.

FiberWay provides the industry's first hardened, software-defined network solution optimized from the core to the edge to deliver next-generation services and position CSPs for long-term, sustainable success!

DZS FiberWay is available in 3 configurations, FiberWay 1, 2 and 6 for addressing unserved or underserved communities of different sizes.



Software Defined Solution

The DZS FiberWay solution and configurations are fully software-defined and managed with [DZS Xtreme](#) making your operational task easier to deploy and manage the solution and accelerate your path to broadband service revenues and serving customers.



Every step in the lifecycle of a service, from service creation, to onboarding new equipment and software, through testing and deployment, to operations, administration and management, needs to be efficient with automation.

The **DZS Xtreme SDN Management and Control** module (Cloud Manager) provides element management of DZS PON OLTs and DWDM transport nodes that are part of the FiberWay solution. It provides a User Interface and APIs to provide full FCAPS management of the DZS Velocity OLTs and Saber DWDM transport nodes within the FiberWay solution. It also provides all the capabilities above over third-party SDN and non-SDN (legacy) devices if needed.

Beyond the SDN capabilities, [DZS Xtreme Access](#) and [Transport](#) automation and orchestration also simplifies this process through an intent-engine that helps you design the next transformational service quickly with minimal code, while our model-driven architecture ensures any integration with your ecosystem suppliers are done only once and reusable for any service thereafter.





DZS Velocity OLTs

The DZS FiberWay configurations for the Last-Mile include different [DZS Velocity Optical Line Terminal](#) (OLT) depending on the size of the community being served. The configurations are environmentally hardened across the entire range of solutions with form factors ranging from fixed **1RU** units (FiberWay 1) through **2-slot** (FiberWay 2), and **6-slot** (FiberWay 6). Complemented by system-on-a-card technology that is common for all systems, DZS Velocity empowers service providers to leap to multi-gigabit services at scale by enabling rapid transition from GPON to XGS-PON and gigabit Ethernet to 10 gigabit Ethernet and on to 50G/100G services via any service port across the range of DZS systems, including stackable options.



DZS FiberWay 1, 2 and 6 OLTs



Line Cards		V1-16XC	V2 Chassis	V6 Chassis	
   	GPON	Max # OLT ports (or combo parts)	16	32	96
	XGSPON	Rack Units	1	2	6
	COMBO	Max Uplink (NNI) Capacity	200Gps	400Gps	900Gbps + 1.2Tbps
G.HSP 50G					



Saber 4400 Edge Transport Platform

The DZS FiberWay solution includes the [DZS Saber 4400](#) DWDM platform purpose-built for the edge and metro. This environmentally hardened and energy efficient 1RU modular transport platform delivers up to 400 Gbps per wavelength and the industry's smallest form factor Colorless Directionless and Contentionless (CDC) FlexGrid [ROADM](#). DZS Saber is the perfect Middle-Mile transport vehicle to both assist in bridging the digital divide as well as allow service provider to gain extended reach and agility at the network edge and in the middle mile.

Given the solution can be deployed in unimproved remote cabinets and huts, this results in savings of up to \$200k per location versus traditional solutions and stacked for extraordinary capacity. Reaching unamplified distances of up to 120km, the Saber 4400 platform also supports transponders/muxponders, amplifiers and add/drop modules. DZS FiberWay helps accelerate transport network deployments cost-effectively for ROADM rings, mesh, linear add/drops or direct point-to-point transport applications.



DZS Saber 4400 Optical Transport Platform

Chronos M4000 Mobile xHaul Router

Another component of the FiberWay platform is the [M4000](#) high performance edge router. This is the DZS solution in the software-defined Chronos portfolio that supports Layer 1-3 service delivery and management of traffic related to cell tower connectivity, xHaul transport of that traffic, and enterprise-scale customer operations and anchor institution requirement.



DZS M4000 Mobile xHaul Router

Customer Premises Equipment

The DZS FiberWay solution includes the [DZS Helix](#) CPE portfolio, an industry-leading range of residential and business [optimized access points](#), [GPON and XGS-PON ONTs and gateways featuring](#) the latest WiFi technologies, business features, and Smart OMCI technology for rapid 3rd party interoperability and manageability. Many of these standards-based solutions have the processing power to provide extraordinary insight into the premises and connected devices, especially when managed by DZS software.



Providing the Ultimate Customer Experience

DZS [CloudCheck](#) and [Expresse](#) software components of the FiberWay solution offers cloud native and [AI-driven network and service assurance and WiFi experience management](#), enhanced by the expertise gleaned from 70M+ subscribers globally. The ML/AI-powered service assurance platform helps ISPs optimize network performance and Quality of Experience by gaining end-to-end visibility and tight control over broadband access and home WiFi networks. DZS also delivers the solution as a fully managed service for time-to-value and operational simplicity. The solution helps improve customer experience and loyalty, unify and simplify operations, reduce churn, increase broadband service margins and upsell opportunities, and stand out from the competition. The offer also includes active probe speed test and TruSpeed reporting capabilities. The offering includes a Mobile App for customer self-service and a GUI for Tier 1 support personnel.



DZS CloudCheck Home App and Support GUI

Deployed in One Optimized Cabinet or Your Existing Cabinet

FiberWay 1,2, or 6 solutions can be deployed and managed as one end-to-end solution in a compact, optimized 14RU cabinet ready for rapid remote deployment. Alternatively, since each element is compact and fully hardened, it can be deployed in most existing cabinets with no additional heat exchangers, enabling savings of up to \$200,000 per location over other solutions.



DZS and FiberWay is BEAD and BABA Ready!

Texas-based DZS has been thinking strategically about BEAD since its inception, and it is the domestic vendor that is best aligned with the strategic needs of potential awardees. DZS is BABA-ready and has a long history of US-based manufacturing and has strong relationships with contract manufacturers with US manufacturing operations. The DZS FiberWay solution is not only fully aligned with BEAD requirements but architected for the long-term success of service provider deployments beyond the end of these stimulus programs. Furthermore, the solution is designed and built in U.S.-based manufacturing facilities today, leveraging a majority of domestically produced components, and thus already aligned with BABA requirements. DZS FiberWay software is not only capable of meeting BEAD reporting requirements but preparing service providers for the realities of remote monitoring and management for rural areas.



Learn more at www.dzsi.com | info@dzsi.com