



# Total Access 5004 Micro Cabinet

## Integrated Outside Plant (OSP) System



FTTH/FTTN



Low TCO

Weather  
HardenedTemperature  
HardenedQuick  
Installation

## Benefits

- Accelerated Time to Market for Broadband Services Delivery
- Extends FTTH Reach Up to 60 km Simplifying Broadband Expansion to Rural and Remote Locations
- Multi-Service Support: GPON, XGS-PON, Combo PON, Active Ethernet, VDSL, POTS
- Pole, Wall, or H-Frame Mounting Options, Delivering Ultra-Low TCO
- Reduces Installation Cost via Flexible Powering Options (AC or Span Power)
- Scales to Support Over 2,000 FTTH Subscribers Per Micro Cabinet

## Overview

The Total Access 5004 Micro Cabinet is the industry's most flexible, modular fiber access solution for rural and low-density broadband service delivery. The Micro Cabinet housing enables service providers to deploy broadband services using Fiber-to-the-Home (FTTH) or Fiber-to-the-Node (FTTN) architectures quickly and cost-effectively. The fiber-fed Micro Cabinet houses a single TA5004. It has fiber and copper subscriber interfaces, enabling delivery of gigabit and multi-gigabit services for low-density locations or remote, under-served areas.

The compact Total Access 5004 supports GPON, XGS-PON, Combo PON (GPON+XGS-PON), Point-to-Point Active Ethernet, VDSL, and POTS deployments enabling delivery of multi-gigabit residential and business services into MDUs, suburban locations, and rural areas. The Total Access 5004 supports temperature hardened access modules, with integrated Nx10GE support to each slot providing a comprehensive solution to launch and expand full-fiber networks.

The TA5004 Optical Line Terminals (OLTs) support up to 2,048 GPON or XGS-PON subscribers to serve residential and business subscribers. The system also supports up to 96 VDSL2 vectored subscribers for FTTN long-ranged copper applications. Supporting fiber and copper interfaces enables easy migration from legacy to next-generation 10G networks.

## Low-Cost Weather-Resistant Deployment

The Micro Cabinet supports mounting on a pole, wall, or H-frame, delivering ultra-low total cost of ownership (TCO). The enclosure is weather-resistant, corrosion-proof, and consists of an environmentally sealed electronics equipment chamber with an integrated air-to-air heat exchanger to cool the TA5004.

The closed-loop heat exchanger eliminates the need to bring outside air into the enclosure, thereby maintaining an environmentally sealed equipment chamber. A fan controller monitors the temperature sensors and regulates the fan speed to maintain the internal cabinet temperature while maximizing fan life and minimizing audible noise and power consumption.

A choice of local AC or remote power via span power is supported, offering flexibility in deployment. The Micro Cabinet is designed for a single person to install, further reducing the cost of installation. This allows for ultra-broadband service deployment within days instead of months, dramatically lowering deployment costs.

# TOTAL ACCESS 5004 MICRO CABINET

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## Product Specifications

### Interfaces

- Uplink:
  - MSM20 Switch Module Supports 2x1/10GE (Up to Two MSM20s Per Chassis)
  - Option of Non-Redundant or Redundant Configuration
- Transport: 8x1/10GE Via ETOS-10 Transport Module
- Management: 10/100Base-T Ethernet Port
- TA5004 Slots 1 and 2 Reserved for Access Modules
- TA5004 Slots 3 and 4 Reserved for Power Card

### Capacities

- Fiber Applications
  - Two Access Modules; Up to 2,000 PON Subscribers Per Chassis (Utilizing 1:128 split)
- Copper Applications
  - One Dual Slot Access Module or Two Single Slot Access Modules; Up to 96 VDSL2 Vectored Subscriber Per Chassis

### Applications and Services

- 10G FTTH for Gigabit and Multi-Gigabit Broadband
- Optical Networking Edge (ONE) for Premium (SLA) 10G Services, Aggregation, and Transport
- Low-Density Locations
- Remote, Underserved Areas

### Management

- Mosaic Software Suite
- Advanced Operational Environment (AOE)
- Remote Management Through SNMP, CLI, and Web-Service APIs (HTTPS)
- Ethernet Interface on MSM for Web and Telnet/SSH Access (In-Band or Out-of-Band)

### Physical

- Dimensions: 21.7 in. x 20.45 in. x 10.57 in. (551 mm x 519 mm x 268.5 mm) (H x W x D)
- Weight: 35 lbs (15 kg)
- Mounting Accessories: Pole, Wall, H-Frame
- External Housing: 0.06 in. Aluminum to Prevent Corrosion
- Access Doors to the Front and Rear of the TA5004 Chassis

### Environmental

- Operating Temperature: -40° F to +115° F (-40° C to +46° C)
- Storage temperature: -40° F to +185° F (-40° C to +85° C)
- Relative Humidity: 100%
- Environmentally Hardened: Fully Sealed, Weather-Resistant, Lightning Protection

### Electrical

- Local AC Power: 100 – 240 VAC, 50/60 Hz
- Span Power: 190 VDC From Conductor to Ground or 380 VDC Between Individual Connectors
  - -48 VDC Nominal
  - 7 Input Channels
  - Lightning Protection Included
- Heat Exchanger: 350W Closed-Loop
- UPS/BBU Capable

### Regulatory Standards

- UL/CSA 60950-1 and UL50-22 NEMA 3R
- Applicable Sections of GR-487-CORE, Issue 5

# Cabinets and Enclosures

## Ordering Information

Equipment	Part No.
<b>Micro Cabinet Fiber Integrated OSP Systems (Access Modules not included)</b>	
TA5004 Micro Cabinet – AC Powered Fiber Configuration (Includes Chassis, Non-Redundant MSM20, Power/Alarm Module, and Fan)	4192M54F1AL1
TA5004 Micro Cabinet – Span Powered Fiber Configuration (Includes Chassis, Non-Redundant MSM20, Power/Alarm Module, and Fan)	4192M54F1SL1
<b>Fiber Access Modules for Micro Cabinet</b>	
Total Access 5000 8-Port GPON OLT Bundle with C+ Optics	4187518F22
Total Access 5000 8-Port XGS-PON OLT Bundle with N2 Optics	4187518F42
Total Access 5000 8-Port 10G Combo PON OLT Bundle with D2 Optics	4187518F32
Total Access 5000 AE OLT Bundle with 10 km Compact BiDi Optics	4187562F10
Total Access 5000 AE OLT Bundle with 20 km Compact BiDi Optics	4187562F20
<b>Micro Cabinet VDSL2 Combo/Overlay Integrated OSP Systems (Access Modules not included)</b>	
TA5004 Micro Cabinet – AC Powered VDSL2 Combo Configuration (Includes Chassis, Non-Redundant MSM20, Power/Alarm Module, and Fan)	4192M54VCAL*
TA5004 Micro Cabinet – Span Powered VDSL2 Combo Configuration (Includes Chassis, Non-Redundant MSM20, Power/Alarm Module, and Fan)	4192M54VCSL*
TA5004 Micro Cabinet – AC Powered VDSL2 Overlay Configuration (Includes Chassis, Non-Redundant MSM20, Power/Alarm Module, and Fan)	4192M54VOAL*
TA5004 Micro Cabinet – Span Powered VDSL2 Overlay Configuration (Includes Chassis, Non-Redundant MSM20, Power/Alarm Module, and Fan)	4192M54VOSL*
<i>*Cabinet configuration available with MS<sup>2</sup> splice modules (L1) or 710 splice modules (L2)</i>	
<b>VDSL2 Combo/Overlay Access Modules for Micro Cabinet</b>	
Total Access 5000 48-Port VDSL2+POTS Combo Dual Slot Access Module	1187132F1*
Total Access 5000 48-Port VDSL2 Vectoring Overlay Single Slot Access Module	1187133F1*
Total Access 5000 48-Port VDSL2 Non-Vectoring Overlay Single Slot Access Module	1187133F2*
<i>*Non-vectoring, Board Level Vectoring (BLV), System Level Vectoring (SLV), and POTS support dependent upon module. I/O modules, Vector Resource Modules (VRM), internal splitters, and cables sold separately.</i>	
<b>Accessories</b>	
Holdup Capacitor Kit (minimizes effects of brief power interruptions)	1192HLDVRCAPF1
100 Pack, 5-Pin GDT Protectors	1179805G1



**Adtran Corporate  
Headquarters**  
901 Explorer Boulevard  
Huntsville, AL 35806  
USA  
adtran.com  
sales@adtran.com

**Adtran Europe Limited**  
Building 2200 Basing View  
Basingstoke RG-21 4EQ, UK  
contact@adtran.com

**Adtran GmbH**  
Jean-Monnet-Straße 4,  
10557 Berlin, Germany  
kontakt@adtran.com

**Adtran Networks Pty.  
Limited**  
L5 330 Collins Street  
Melbourne, Victoria, 3000  
Australia  
australia@adtran.com

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