

With the SMHAP DOCSIS® Wi-Fi® access points (APs) by Technetix, wireless plant extensions and hotspot services are just one truck roll away. A quick and easy connection at any power passing tap or coupler opens new revenue streams.

The SMHAP unit is a standards-compliant access point with an integrated DOCSIS cable modem for backhaul. Single and dual high-power 350 mW radios with 802.11ac 2x2 MIMO technology support TCP throughputs up to 100 Mbit full duplex.

The SMHAP unit can be used in both bridged and routed configurations. Hotspot, point-to-point, point-to-multipoint and mesh applications can all be implemented on this extremely flexible device. All variants of the SMHAP unit are available as Mikrotik, RouterOS installed. This powerful, networking platform supports advanced routing protocols, such as OSPF and MPLS/VPLS. VLANs can be tunneled using L2TP or SSTP, with BCP support. Per connection queuing, along with 7 firewall and bridge filters, enforces equal access for all subscribers according to their service class, and allows traffic shaping at the edge.

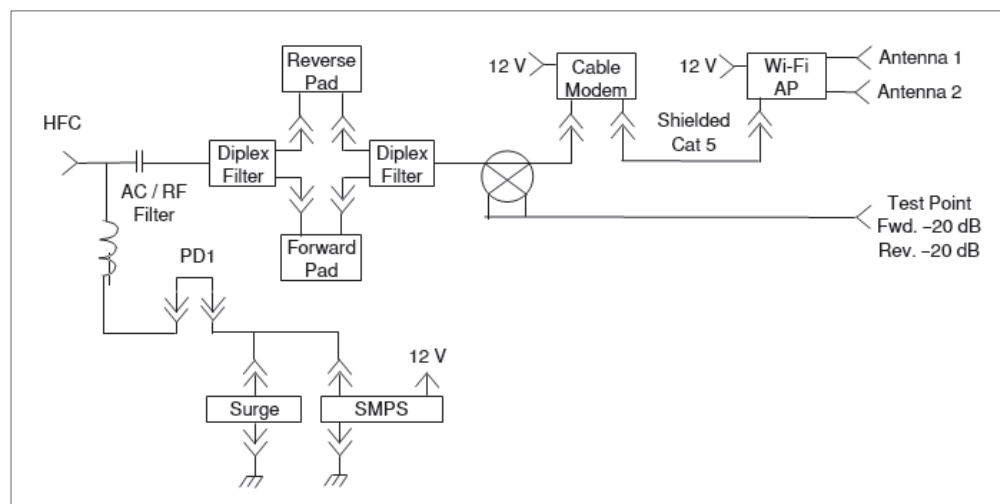
The SMHAP unit can be managed via SNMP, HHTP, CLI (SSH or Telnet) and an easy-to-use Windows®-based utility. Remote firmware updates are supported. User management can be done with a standard radius server, or third-party, user-management service. For smaller deployments, the UserManager package is included. Many vendors of DOCSIS provisioning software have modules to support user management for the SMHAP unit as well.



FEATURES

- Diecast aluminum housing (clamshell design)
- Mounting configurations: wall, pole, vault, mast or strand
- Dual gaskets provide 15 PSI weatherproof seal
- Temperature-cycled: -40°C to +60°C (-40°F to 140°F)
- Designed to protect against surges
- DOCSIS 3.0/3.1. Optical options available
- Forward and reverse -20 dB test points
- Modem “sweet-spotting” through diplex filters and JXP-type attenuators
- Cable plant-powered (40-90 VAC)
- Single and dual 802.11a/b/g/n/ac radio options
- Powered by Mikrotik, HP, Ubiquiti and additional options
- Omnidirectional and directional sector, panel, grid and dish antenna options
- 2x2 MIMO 2 spatial streams
- Supports 16 virtual service communities (SSID)
- Multiple secure management options
- RADIUS interface for authentication, authorization and accounting
- Hotspot, point-to-point/point-to-multipoint (PTP/PTMP) operations

FUNCTIONAL SCHEMATIC



SPECIFICATIONS

Parameter	Specification
Cable Modem	
Certifications	Cablelabs DOCSIS® 3.0/3.1
Band Plans	DOCSIS (annex B)
Network Configuration & Management	TFTP, SNMP V2, (V3 for DOCSIS 3.0)
RF Input Sensitivity	+15 to -15 dBmV
Input Impedance	75 Ω
Privacy	BPI+
Downstream Modulation	64 or 256 QAM
Upstream Modulation	QPSK & 8,16,32,64,128 QAM
Radio	
TX Power	350 mW @ 6 Mbit; 160 mW @ 58 Mbit
RX Sensitivity	-94 dBm @ 6 Mbit; -81 dBm @ 54 Mbit
Standards	802.11a/b/g/n/ac (depending on model)
HFC Interface	
Insertion Loss	5 dB ± 1
Return Loss	16 dB (max)
Airtight	15 PSI
EMI Isolation	100 dB (5-1000 MHz)
Power, Environmental & Physical	
Surge Protection	Gas discharge tube
Operating Voltage	40-90 VAC (pseudo sine)
Power Consumption	18 W (dual radio)
Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Dimensions (H x W x D)	9.0"H x 12.0"W x 6.0"D (22.8H x 30.5W x 15.3D cm)
Weight	8.0 lb (3.6 kg)

ORDERING INFORMATION

SMHAP	-	Modem ⁽¹⁾	-	Radio ⁽¹⁾	-	Frequency
		xx.x		x		x.x
		D3.0 = DOCSIS 3.0		Single		2.4 = 2.4 GHz
		D3.1 = DOCSIS 3.1		Dual		5.8 = 5.8 GHz
						2.4/5.8 = 2.4/5.8 GHz

NOTE:

(1) Contact your sales representative or the factory for backhaul & radio options that best suit your network

Accessories	
Part #	Description
3519-131	5.5 dB gain rubber whip antenna, 2.4 GHz
3519-142	5.5 dB gain rubber whip antenna, 5.8 GHz
3502-105	90° N, male-female connectors required for omni antennas