



Generonix *CopperReach*: Remote Network Power and Ethernet Access



CopperReach is a simple, flexible, and inexpensive solution to delivering reliable power and broadband connectivity to your field mounted electronic equipment. For wireless Access Points,

outdoor surveillance cameras, traffic monitoring devices, animated displays, or any other outdoor equipment needing reliable power and/or Internet connectivity, there is a *CopperReach* unit that will meet your needs.

Reliable Network Power

CopperReach twisted copper pair telephone lines from a central office to deliver power to a remote device. It converts battery backed *network power* provided as a local exchange carrier service to local AC or DC power that can be used by field-mounted equipment. Power is unaffected by commercial power outages and does not require local battery backup: therefore no periodic truck-rolls are required to replace field batteries. In addition, no negotiations with power utilities for lamppost power are needed. *CopperReach* provides options:

- AC power (up to 100 watts)
- DC power (up to 120 watts), direct or PoE
- AC & DC power (up to 100 watts)

Network Backhaul

CopperReach may be a stand-alone power supply, or optionally configured with either an Ethernet to DSL gateway or a fiber optic media converter, providing Ethernet network backhaul for local devices. The PoE RJ45 connectors provide Ethernet connection up to 295 feet away, supporting up to 100 Mbps broadband connectivity for VDSL2 or for fiber networks.

Outdoors Hardened Enclosure

Each *CopperReach* field node is a temperature hardened, lockable, and weatherproof enclosure for operating in harsh outdoor environments. It is designed with flexible cable and wire management entrance options and ground visible LEDs to support field troubleshooting.

Rapid Deployment

CopperReach Field Nodes can be mounted on aerial support strands, poles or buildings. One dispatch and you are ready to connect and power field devices anywhere there is a telephone line.

Centralized Remote Management

CopperReach management platforms prevent local users from causing changes in operational parameters while allowing a centralized network management total control over configuration, software and diagnostics. Remotely powering down/up each field node is possible, saving a truck roll and providing an extra level of recovery.



CopperReach
Patented Field Node with Strand Bracket and open Customer Access Compartment

Specifications

Dimensions & Weight	Width: 13.25 in., Height: 9.5 in., Depth: 6 in. (without mounting brackets) Weight 8.75 lbs., 9.75 lbs. with AC power option
Mounting	Mounting brackets for Strand, Pole, and Wall
Power Out	DC option 48 V, 120 watts, or four PoE 12.95 watt connectors = 51.8 watts max. AC option 110 V 60 Hz 100 watts max., with ground visible LED power indicator
Environment	Operating temperature -40 to +55 degrees Celsius; Relative humidity 5 ~ 100%
Certifications	Designed to meet NEMA 4, UL 60950-1 & 60950-21, FCC Part 15 Class A
Connections	Input: one 6 pin Molex connector for network power and optional DSL DC output option: <ul style="list-style-type: none"> • Four RJ45 PoE (802.3af) • One RJ45 for Ethernet • One 6 pin Molex with +48 or -48 VDC power AC output option: 3-pronged appliance outlet Fiber Optic option: One single mode UPC/SC connection **
DSL*	ADSL (ITU-T G.992.5, ITU-T G.992.3, ITU-T G.992.1, ANSI T1.413 Issue 2), ADSL2+ up to 24 Mbps downstream, 1.3 Mbps upstream, VDSL2 standard ITU-T G.993.2, up to 100 Mbps symmetrical; Automatic switching between DSL versions based on DSLAM support; support for 2 SSIDs
ATM*	RFC 2364 (PPPoA), RFC 2684 (RFC 1483) Bridge/Route, RFC 2516 (PPPoE), RFC 1577 (IPoA), supports 8 PVCs, AAL type = AAL5, ATM service class = UBR/CBR/VBR, ATM UNI support = UNI3.1/4.0, OAM = F4/F5
DSL Management*	Supports TR-069, SNMP, Telnet, Web-based management, Configuration backup and restoration, Software upgrade via HTTP, TFTP server, or FTP server Also supports remote software power on/off to field nodes from central office
Bridge Functions*	Transparent bridging and learning IEEE 802.1d, VLAN support, Spanning Tree Algorithm, IGMP Proxy
Routing Functions*	Static route, RIP, and RIPv2, NAT/PAT, DHCP Server/DHCP Relay, DNS Proxy, ARP
Security Functions*	Authentication protocols: PAP/CHAP, TCP/IP/Port filtering rules, Port triggering/Forwarding, Packet and MAC address filtering, access control, SSH
Fiber**	IEEE 802.3u 100BASE FX, single mode single strand UPC/SC
Ethernet (for DSL and Fiber Optic Options)	10/100 Base T and PoE (IEEE 802.3, 802.3u, 8023.af, Auto-sense, MDI/MDX support)
Gateway Features*	RADIUS client, IP /MAC address filtering, Static route/RIP/RIP v2 routing functions Dynamic IP assignment, IP QoS, NAT/PAT, IGMP Proxy and fast leave, DHCP Server/Relay/Client, DNS Proxy, Auto PVC configuration, Per-VC packet level QoS, Up to 8 VCs, Embedded SNMP agent, Web-based management, Remote configuration and upgrade. Supports TR-069, Configuration backup and restoration, FTP server, TFTP server.

* DSL option only ** Fiber optic option only

For More Information

www.generonix.com or 866-464-4693

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