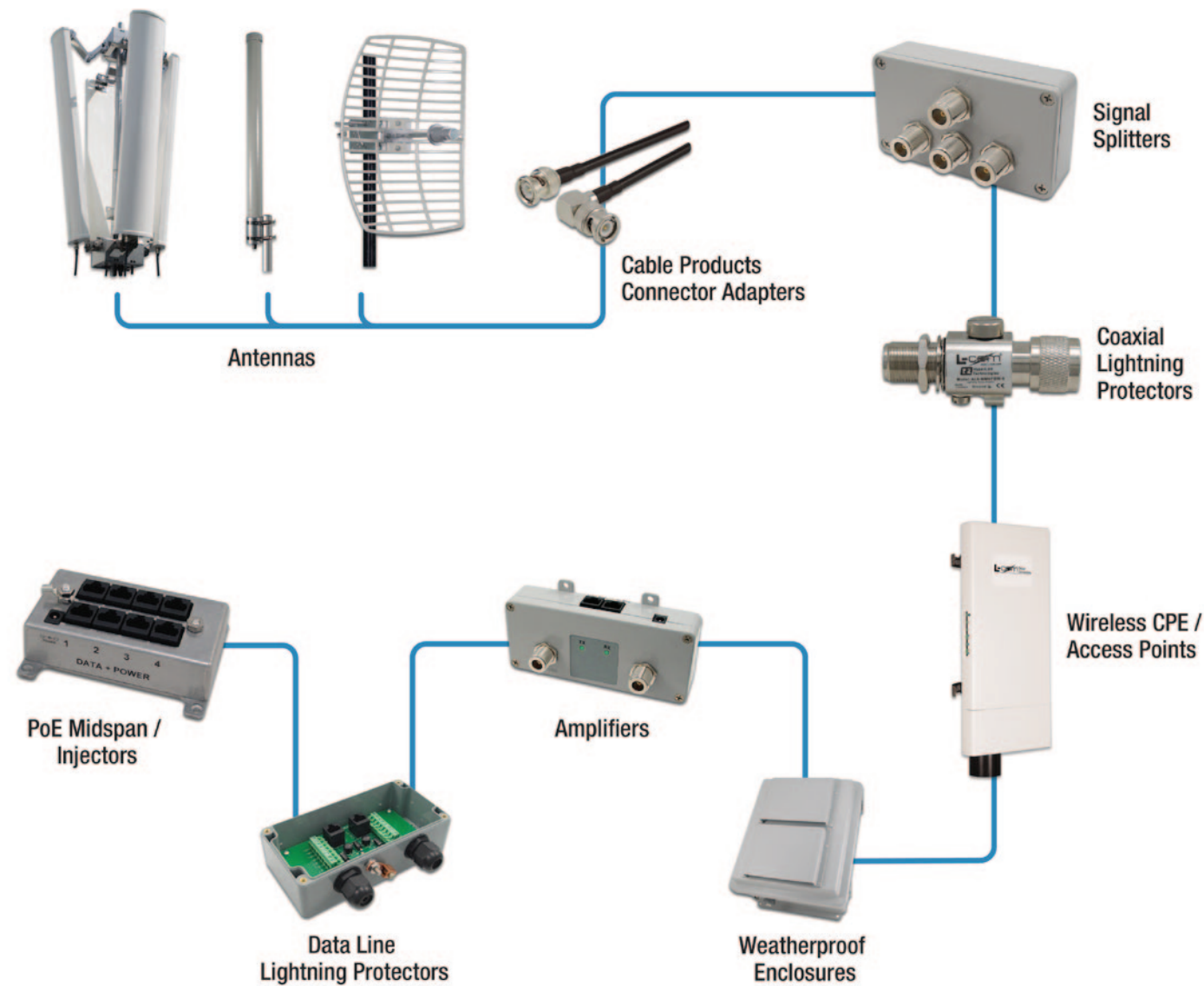


High performance wireless solutions from L-com




**Nobody connects you like L-com**

# Wireless Products Applications Sheet




# Wireless Applications


Aerospace/Aviation	Agriculture	Gov't/Municipalities	Industrial	Infrastructure	Marine	Medical	Military	Oil/Gas	Security	Telecom	Theme Park	Transportation
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**1 Base Station Antennas**  
L-com's base station antenna types include directional grid and dish, Yagi, omnidirectional, panel and sectorial arrays. Available for 400 MHz to 5.8 GHz operation, these antennas are suitable for IEEE 802.11 a/b/g/n, 802.16, 802.20 and WiMAX applications. MIMO type base station antennas are also available.




**2 In-Building Antennas**  
From circular antennas that look like smoke detectors to ceiling mount omnidirectionals, these antennas are ideal for in-building IEEE 802.11 a/b/g/n applications such as WiFi networks to public wireless hotspots. Additional types include patch, MIMO and multi-band antennas.



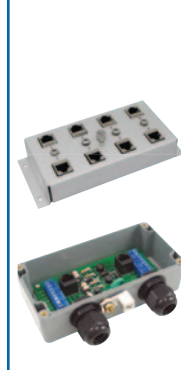
**3 Mobile Antennas**  
Omnidirectional mobile mount antennas with magnetic and NMO mount options are designed for demanding applications including service vehicles, public transportation, law enforcement, mining and construction vehicles. These compact high performance antennas are available for 900 MHz, 1.9 GHz, 3.5 GHz and 2.4 GHz operation.



**4 Antenna Mounts**  
L-com's extensive line of mounting bracket options include wall mounts, ceiling mounts, window mounts, mast mounts, magnetic and NMO mounts as well as marine mounts. Also available universal tube mounts which allow base station type antennas to be mounted to a wall or roof without the need for a mast or tower.



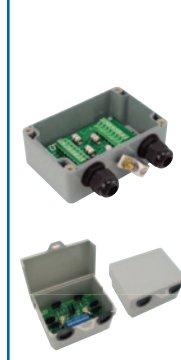
**5 Coaxial Protectors**  
L-com's coaxial lightning and surge protectors are available in Quarter Wave and Gas Discharge Tube models for 0-6 GHz and 0-3 GHz operation. Gas discharge tube models feature an easily replaced gas tube element, multi-strike capability and bi-directional protection. The non gas tube design of the quarter wave protector features multi-strike capability and fast response time.



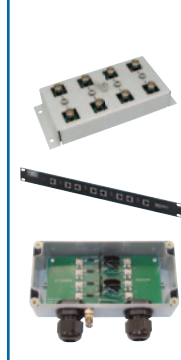
**6 Data Line Protectors**  
L-com's CAT5/5e/6 lightning and surge protectors are designed to provide protection for 10/100 and 10/100/1000 Base-T networks and the expensive equipment attached to them. Features include Power-Over-Ethernet compatibility and low to high power models. Available in indoor, outdoor, rack mount, DIN mount and wall mount models.



**7 Telephone / DSL Protectors**  
Designed to provide lightning and surge protection to telephone, DSL and T1 lines, these protectors are available in multiple power levels for indoor and outdoor applications. Options include RJ11 jacks, screw and punch down terminals, DIN rail mount, rack mount and industrial grade weatherproof enclosures.




**8 Control Line/Sensor/AC/DC Protectors**  
L-com offers an extensive line of lightning and surge protectors for RS-422/485 communication lines, RS-232 sensors and control lines, load cell and RTD lines, AC/DC control lines and 4-20 mA current loop sensors and controllers. Designed for indoor and outdoor installations, these protectors are available in multiple power levels.




**9 Audio/Video Protectors**  
The weatherproof AL-D2 Series of audio system protectors are ideal for office complexes and outdoor speaker and public address systems. Coaxial video surge protectors protect against lightning surges or noisy electrical equipment. Single and quad channel & quad channel 19" rack mount coaxial video surge protectors protect surveillance and CCTV cameras, DVRs, surveillance PCs and video monitors.



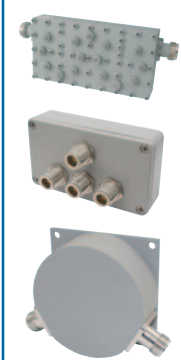
**10 Grounding Kits / Accessories**  
Grounding kits withstand the damaging effects of lightning currents in excess of 200kA, comply with MIL-STD-188-124A and support 400, 600, and 900 series coaxial cable. Grounding pipe clamps fit around existing conduit pipe or water pipe for a secure ground. (Recommended for 1/2"-3/4" diameter pipe) L-com waterproof tapes environmentally seal cables and connectors and support all outdoor installations.




**11 WLAN Amplifiers**  
Since 1994, HyperLink has been an industry leader in the development and manufacture of bi-directional WLAN amplifiers suitable for a wide array of commercial, military and Homeland Security applications. Featuring Automatic Power Control (APC), HyperLink amplifiers are available for 900 MHz, 2.4 GHz, 3.5 GHz, 4.9 GHz and 5.8 GHz operation and support IEEE 802.11a/b/g/n applications.



**12 FCC-Certified Amplifier Kits**  
L-com's FCC Certified WiFi amplifier kits are available to our USA customers for purchase without the need for any special FCC licenses or FCC forms to fill out. These 2.4 GHz kits support IEEE 802.11b/g applications and are available in 100 mW, 250 mW, 500 mW and 1 Watt versions. Each kit includes a WLAN amplifier and a wireless USB adapter with detachable antenna.




**13 RF Splitters / Filters**  
For connecting multiple antennas to a single radio, L-com splitters are available for 900 MHz, 2.4/3.5/5.4/5.8 GHz and wideband 800 MHz to 2.4 GHz operation. L-com's Ultra-High Q 4-pole and 8-pole band pass filters provide excellent channel rejection and are available in fixed channel or full band models. L-com diplexers can be used to connect either two antennas or two radios using 2.4 GHz and 5 GHz frequencies.



**14 PoE Midspans/Injectors/Hubs/Switches**  
L-com PoE Midspan/Injectors are available in single and multi-port models for CAT5/5e/6 applications and support 802.3af/at standards. Midspan/Injector kits include 48W or 70W power supplies. PoE Injector Hubs and Switches comply with IEEE 802.3, 802.3u and 802.3af standards and are equipped with 8, 12 or 24 10/100BASE-TX Fast Ethernet ports.



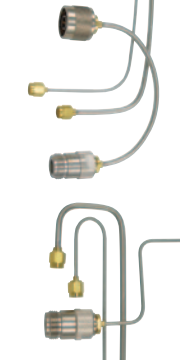
**15 CPE / WAP / Wireless adapters**  
Complete wireless solutions include access points, wireless bridges, mesh radios, radio modules, routers and wireless adapters. For the outdoor wireless market, L-com CPE wireless access points are all-in-one cost effective weatherproof wireless devices featuring high output power as well as all the essential features for both operating as an Access Point or a CPE Client.




**16 Low-Loss Bulk Coax Cable and Assemblies**  
L-com's 50-ohm low loss coaxial cable offers similar performance at a lower price when compared to Times Microwave's LMR cable. From 1.13 mini-coax to 900-series, L-com manufactures and stocks the widest selection of coax pigtailed and cable assemblies. Bulk cable is available by the foot or on reels up to 1000ft.



**17 Coax Connectors / Adapters / Tools**  
L-com's 50 Ohm coax connector types include N, TNC, SMA, BNC, QMA, MMCX, MCX, UHF, F, FME and are available in standard or reverse polarity configurations. Inter Series and Within Series adapters provide the functionality to connect interfaces of the same type or different. Professional grade coaxial strip and crimp tools are available individually or in kits. Dies are available for most connector and cable types.



**18 Semi-Rigid / Formable Cable Assemblies**  
L-com offers quality crafted .085 and .141 Semi-Rigid and Formable coax cable assemblies that are designed, manufactured and tested using state of the art equipment. In addition to our standard cable types, we can build cable assemblies using Semi-Rigid Low-Loss Aluminum or Copper cable from sizes of .047 to .250 with a wide array of available connector types.



**19 AISG Connectors / Cable Assemblies**  
Enabling wireless providers to remotely adjust their antenna systems, L-com's EMI-protected and IP67 rated AISG compatible control cable assemblies feature FS1 type DIN connectors. These connectors are specified for the control interface for these systems as well as for industrial control applications. AISG cable assemblies are available in lengths from 1 meter to 60 meters.



**20 Enclosures**  
L-com's NEMA rated enclosures are ideal for remote WLAN equipment installations, indoor and outdoor, hot and cold temperature environments, solar powered applications, corrosive environments, sub-zero installations, hotspot applications and protection of equipment from theft or damage. With over 10 sizes to choose from, options including heat, cooling, AC or DC power, and with PoE interfaces.