HUTTON CANADA Dealer Catalogue













www.comprodcom.com



www.radiowaves.com



Very Well Connected™

www.gamberjohnson.com





www.westell.com







www.gomultilink.com



www.bridgewave.com



www.jackelite.com



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CABLE AND CONNECTORS





KIT-CC-FULL

Corrugated tool kit for 500HM Complete Kit







Comp Pro® Compression Connectors

Overview

The Comp Pro[®] Product Line utilizes a patented compression technology that offers revolutionary advantages for a water-tight connection, easier installation, and improved system reliability on braided cables.

Features and Benefits

- Wide 360° contact and integrated air tight weather seal held in place by patented technology and material
- 360° center conductor contact for optimal signal transmission
- Threaded post for easy installation and strong hold
- Single piece connector for fast and consistent installations





COMP-NM-400



www.timesmicrowave.com



LMR[®]-195

Ideal for...

- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs
- Any application (e.g. WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Mobile Antennas) requiring an easily routed, low loss RF cable
- Drop-in replacement for RG-58 and RG-142

LMR[®]-240

Ideal for...

- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs (e.g. WLL, GPS, LMR, Mobile Antennas)
- Any application (e.g. WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Mobile Antennas) requiring an easily routed, low loss RF cable





www.timesmicrowave.com



LMR[®]-400

Ideal for...

- Drop-in replacement for RG-8/9913 Air-Dielectric type Cable
- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs
- Any application (e.g. WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Mobile Antennas) requiring an easily routed, low loss RF cable
- NEW! Times Protect[®] LP-18-400 protector-series

LMR[®]-600

Ideal for...

- Jumper Assemblies in Wireless Communications Systems
- Short Antenna Feeder runs
- Any application (e.g. WLL, GPS, LMR, WLAN, WISP, WiMax, SCADA, Mobile Antennas) requiring an easily routed, low loss RF cable





1/2" CELLFLEX[®] Low-Loss Foam-Dielectric Coaxial Cable 1/2" CELLFLEX[®] Superflexible Foam-Dielectric Coaxial Cable 7/8" CELLFLEX[®] Low-Loss Foam-Dielectric Coaxial Cable



1/2" CELLFLEX® Low-Loss Foam Dielectric Coaxial Cable

7/8" CELLFLEX® Low-Loss Foam Dielectric Coaxial Cable

Features and Benefits

- Low Attenuation: highly efficient signal transfer
- Complete Shielding: creates a continuous RFI/EMI shield that minimizes system interference
- Low VSWR: contribute to low system noise
- **Outstanding Intermodulation Performance**: solid inner and outer conductors virtually eliminate intermods.
- **High Power Rating**: outstanding heat transfer properties and temperature stabilizing dielectric materials provide safe long term operating life at high transmit power levels
- Wide Range of Application: Typical areas are feedlines for broadcase and terrestrial microwave antennas, wireless cellular, PCS and ESMR base stations, cabling of antenna arrays, and radio equipment interconnects





Shireen, Inc. designs, develops and manufactures components and systems for the Broadband Wireless, SCADA, Military and Telecommunications industries. Their solutions include everything from "mission critical" components for military communication systems to increasing the power of WiFi installations.



DC-202

SHIRLEN FP-1204 CUDOOR FIBER · PONKOR



Category Cables

DC-1042 Outdoor Shielded CAT5E with Dry Gel Tape, FTP

DC-1021 Outdoor Shielded CAT5E, FTP

DC-2021 Outdoor Shielded CAT6, FTP

DC-2030 Outdoor CAT6 with Dry Gel Tape, UTP

DC-1030 Outdoor CAT5E with Dry Gel Tape, UTP

Fiber-Power Cables

FP-1204 Fiber & Power Composite Cable with 12AWG 2C and 4C Single Mode Fiber

Fiber-Power-Data Cables

DFP Data, Fiber & Power Composite Cable with 12AWG 2C, 4C Single Mode Fiber, and 1 CAT6 FTP cable



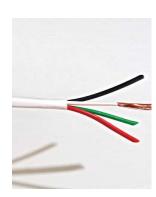


Founded in 1971 Remee's focus has always been on producing quality products you can rely on. No matter which cable you need they are a brand that you can trust.

725120

Control, Security and Audio Cables

12AWG 2C Unshielded Plenum



725140	14AWG 2C Unshielded Plenum
725160	16AWG 2C Unshielded Plenum
900904	16AWG 4C Unshielded Plenum
725180	18AWG 2C Unshielded Plenum
725223	22AWG 4C Unshielded Plenum

Fiber Cables

33-XXX-12H-RMNONP 33 Series Distribution Tight Buffer 50Micron MM 10Gig OM4 (2-12 Fiber) OFNP

33-XXX-76E-RYNONP 33 Series Distribution Tight Buffer SM Ehanced (2-12 Fiber) OFNP

33-XXX-22J-RBNOOP 33 Series Distribution Tight Buffer Indoor/Outdoor 62.5Micron MM (2-12 Fiber) OFNP

28-XXX-76E-EBSXWN 28 Series Loose Tube Single Jacket Single Armor SM Enhanced

28-XXX-12S-EBSXWN 28 Series Loose Tube Single Jacket Single Armor 50Micron MM 10Gig OM3

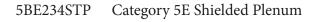






Category Cables

5BE244UTP/350 Category 5E 350MHz Plenum



5AEFLD Category 5E 350MHz Flooded Polyethylene Jacket

6B234UTPENH Category 6 650MHz Plenum

6DBFLD Category 6 Flooded Polyethylene Jacket

6B234STPENH Category 6 Shielded 550MHz Plenum

6UB234UTP Category 6A Augmented 500MHz Plenum

Coaxial Cables

725107	RG 11U Aluminum Braid CMP	
R001567	RG 6U	Aluminum Braid Direct Burial
725103	RG 6U	UQuad Shield CMP
R001531WBT	POLY	RG 6U CCA Braid Water Blocking Tape Direct Burial
R001510WBT	POLY	RG 59U CCA Braid Water Blocking Tape Direct Burial
725526		RG 59U with 18/2 Siamese Plenum CMP







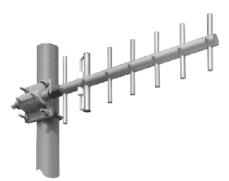


Mobile Radio





TY-900 Yagi Antenna



The Kathrein-Scala TY series are rugged broadband yagi antennas fabricated of 6061/T6 aluminum rod and seamless drawn pipe, anodized for maximum reliability and corrosion resistance. The hardware and fastenings are stainless steel. The internal balun, coax feed and connector are sealed in a foam potting system to prevent moisture penetration and assure long service life in severe environmental conditions. The heavy aluminum mounting casting allows installation for V or H polarization.





DC Remote Controls



The DR series DC remote control units are designed to provide control of a remotely located base station over an in-house or leased metallic wire pair. The DR series units use a simple dip switch to select the desired control current and other features. Standard features include: receive and transmit audio compression, front panel transmit capability, line continuity sensor, parallel cross mute, line operated PTT indicator, and 2 watt audio output.

Tone Remote Controls

The TR series tone remote control units are designed to provide control of a remotely located base station or repeater over a voice grade wire pair. The TR series units use the EIA standard sequential tone format which provides 2175 Hz. guard tone, 1950/1850 Hz function tones, 2050 Hz. monitor and 2175 Hz. hold tone. Standard features include: receive and transmit audio compression, front panel transmit, PTT indicator, and 2 watt audio output.





MULTIPLIER

www.multiplier.com





PolyMax HPC Batteries

Batteries powered by PolyMax HPC LiPo cells are best-in-class products that feature high capacity and these important benefits:

- Longer runtimes compares to other two-way radio battery options
- Greater cycle life compared to Li-lon cells (500+ vs. 300)
- Significantly lighter weight compared to NiMH batteries with similar capacity
- Self-discharge rate of less than 5% per month which is one third that of NiMH batteries
- Solid construction and quality fit with radio
- Extended warranty 24 months for capacity (80%) and 24 months for materials and workmanship
- Can be charged using Endura, Logic, or OEM chargers designed for Li-lon batteries





www.specotech.com



SPC 10 & SPC 15

- Weather-resistant, aluminum construction
- Includes mounting bracket
- Rubber bell protector
- 2 year warranty

CBS 240

Our all weather professional marine communications speaker has a 4" polypropylene cone. It features a 5 watt maximum power rating at an 8 ohm impedance. It is encased in black ABS plastic with stainless steel hardware, including an 180 degree deluxe adjustable bracket. A 10 foot cable and 3.5mm miniature plug are also included. It is sold individually.





G G U Y S

www.caseguys.net

Do you have your radio case?

Case Guys provides cases that overcome everyday use!





Power and Related Products





www.astroncorp.com

N2412 Converter

- Input voltage range: 22 to 72Vdc, depending upon model
- Handles up to an extra 25% peak current during peak power events
- Built-in protections: Overvoltage, overcurrent and short-circuit protections with crowbar on Non-Isolated models Up to 94% efficiency
- 48V Isolated models meet SAE-J1113-11 specification for Immunity to Transients (Surges)
- LED visual indicators: DC-OK (Green) and Fault (Red)
- Includes a separate Remote ON/OFF connection terminal for use with an ignition switch
- High quality heavy duty industrial metal construction with easy access Terminal Block screw connections
- RoHS (lead free) compliant







www.samlexamerica.com



Desktop Switching Power Supply Model SEC-1212CE 10 Amps

Design Features

- Advanced switch-mode technology
- Reliable power with minimum weight and size
- Circuit innovations minimize output voltage ripple and RFI
- Input voltage can be set at 120 VAC or 240 VAC



Desktop Switching Power Supply Model SEC-1223 23 Amps



Design Features

- Advanced switch-mode technology
- Reliable power with minimum weight and size
- Circuit innovations minimize output voltage ripple and RFI
- Input voltage can be set at 120 VAC or 240 VAC
- UL listed to both USA & Canadian safety standards



Rackmount Switching Power Supplies Model SEC-40BRM 40 Amps

Design Features

- Voltage/Ampere meter
- Module status LEDs, fault indicator LEDs and fault alarm are standard features on all models
- Highly regulated output voltage
- Short circuit protection and overload current
- 25 pin D-sub connector for remote monitoring system



www.samlexamerica.com

DC-DC Step Down Converters Model SDC-12 12 Amps

Design Features

- Advanced switchmode design
- Mount in almost any location
- Compact and light weight
- Reverse polarity protection
- High efficiency
- Cycle by cycle current limiting circuit
- Over voltage protection
- Short circuit protection



DC-AC Inverter Modified Sine Wave Model PSE-12125A 12 VDC 120 VAC

Design Features

- High efficiency PWM design
- LED bar graphs indicate input voltage, input current and output power
- Temperature controlled cooling fan
- Low input voltage warning alarm
- Optional remote operation with Samlex Model RC-15 remote control (sold separately)
- Protections: high/low DC input voltage, over temperature and over load shut down
- High output power surge





DC-AC Converter Modified Sine Wave Model SAM-450-12E 12 VDC - 230 VAC

Design Features

- Modified Sine Wave output
- Soft Start Technology prevents shut down due to over current on cold start of AC loads
- USB charging port: 5V, 500 mA
- Load controlled fan saves power during low load conditions
- Protection against short circuit, overload, low and high DC input voltages, over temperature and leakage
- Light weight and compact aluminum enclosure





www.samlexamerica.com



DC-DC Step Down Converters Model SDC-23 20 Amps

Design Features

- Advanced switchmode design
- Mount in almost any location
- Compact and light weight
- Reverse polarity protection
- High efficiency
- Cycle by cycle current limiting circuit
- Over voltage protection
- Short circuit protection



DC-AC Inverter Modified Sine Wave Model PSE-24125A 24 VDC 120 VAC

Design Features

- High efficiency PWM design
- LED bar graphs indicate input voltage, input current and output power
- Temperature controlled cooling fan
- Low input voltage warning alarm
- Optional remote operation with Samlex Model RC-15 remote control (sold separately)
- Protections: high/low DC input voltage, over temperature and over load shut down
- High output power surge



DC-DC Step Down Converter Model IDC-100A-24 4 Amps

Design Features

- Fully isolated
- Short circuit protected
- Current limited





www.ict-power.com

ICT provides DC power conversion products for the land mobile radio, fixed wireless broadband, small cell and industrial DC power markets. Their DC power supplies, fault-tolerant power systems, voltage converters, battery chargers, power inverters, DC backup systems, and Ethernet-enabled intelligent power supplies and DC power distribution panels are used in emergency response dispatch centers, on board vehicles, and in tower, communications and industrial power sites around the world.

Their focus is in using innovation to develop DC power products and solutions that help our customers solve their power challenges while providing the best value and lowest cost of ownership.

Modular Series

The ICT Modular Power Series provides N+1 redundancy with 700 watt hot swappable 48, 24 or 12 volt power modules. A number of optional factory-installed modules can be selected to provide TCP/IP monitoring and control, advanced battery management features, battery breakers, low voltage disconnects, and fourposition breaker-protected power distribution including load current monitoring and remote power cycling over Ethernet.







www.ict-power.com

Comm Series



When you need clean reliable DC power for your communications needs, look to the industry leader in switch mode power supplies for peace of mind. Since 1986 ICT has been a leader in reliability, support and innovation. We design, manufacture, ship and support our products locally in our North American facility. When you need high quality, field tested communications power supplies with fast reliable delivery, rely on the ICT Comm Series.

Industrial Series

ICT Industrial Power Series converters are nonisolated DC to DC converters designed for use on negative ground systems. Each converter is designed for high efficiency and long service life. The rugged case and modular design have proven durable in harsh environments. ICT offers an unmatched selection of voltages and currents to meet your requirements. Standard features on all models include fuse protection, high surge capacity, easy access mounting holes, and a terminal strip connector.







www.havis.com

Chargeguard CG.X



ChargeGuard is an easy to install auto shut-off timer that automatically turns mobile equipment on when you start the engine. When you turn the engine off, the equipment stays on for an adjustable period of time, then is automatically disabled. When properly deployed, you can ensure your fleet never has another dead battery, at a very affordable price — cheaper than a single tow. With ChargeGuard[®] Auto Shut-off Timer, equipment is always available, and you never have to remember to turn it on or off.



Test and Measurement





www.bird-technologies.com

7020-1-0101-1 Power Sensor



The 7020-1-0101-1 Power Sensor is an economical plug and play solution to your power measurement needs. The sensor determines and reports Forward and Reflected True Average Power and VSWR over a wide frequency range of 350 MHz to 4.0 GHz. It also never requires field calibration, only requires factory calibration once per year, and is traceable to National Institute of Standards and Technology (NIST).

Channel Power Monitor

The channel Power Monitor is comprised of a 1 RU central processor and a variety of sensors, which work together to monitor all components of a radio system, including each individual radio, the combiner, the feed lines and antenna. These inexpensive sensors are placed throughout the system, with a 5% accuracy that is traceable to NIST and as reliable as you have come to expect from Bird technologies.







www.bird-technologies.com

Site Hawk Analyzer

- Easy to operate and field ready for first-time, occasional and experienced users.
- FDR (Frequency Domain Reflectometry) measurement method results in a highly reliable assessment of the health of critical components in your system; ultimately providing a "heads-up" before a failure occurs.
- Fault location or DTF mode indicates VSWR or Return Loss levels at each point along the cable and antenna system length.
- Cable Loss function measures insertion loss of the cable system over a given frequency range.
- Units cover frequency ranges of 85-4000 MHz and 300 kHz-200 MHz.
- USB communication port for connection to storage device and battery charging.
- Three Year Warranty!!
- Includes Bird RF Meter App



Bird

SiteHawk

Now Includes Calibration Combo!





www.telewave.com



Broadband RF Wattmeter Model 44A, AP

- Requires no elements or "slugs"
- No band switching
- Measures 1 to 500 watts
- 5 power ranges
- 5 watt full scale range
- Covers 20 1000 MHz
- Measures forward and reflected power
- -40 dB RF sampling port
- Shock-mounted meter
- Low temperature operation
- Quick-change connectors
- Light weight: 3 LBS

TC44 Carrying Case

The Telewave TC44 Carrying Case is custom made specifically for the Telewave Model 44A/ AP and Model 44L1/L1P wattmeters. The TC44 features rugged leather construction for years of use, with oversize rivets at all joints, and a large hand strap. The case also provides room for the operation manual and has a special compartment at the bottom for storing loads, test cables, or other accessories.





Towers and Site Hardware





www.trylon.com

With over 80 years of industry experience Trylon specializes in designing and building towers, mounts and accessories for Telecommunications, Infrastructure, and Energy applications.

SuperTitanKD Tower Series

The SuperTitanKD is a modular tower that can be built up to 58m (190 feet) high. Consisting of 21 standard sections, each 3m (10 feet) high, this modular system can be configured to create towers of varying heights and loading capacities. The SuperTitan KD design conforms to TIA and CSA standards and can be stamped by a professional engineer.

The SuperTitanKD is supplied knocked down and is assembled on site. Trylon has recently introduced new packaging for the SuperTitanKD which makes shipping even more cost effective

SuperTitanWELD Tower Series

Trylon's new SuperTitanWeld has the same advantages in size and strength, modularity and documentation (P.E. stamped drawings) of the SuperTitanKD, but is significantly easier to assemble.

SuperTitanMAX Tower Series

Designed using the same basic modular configuration as the SuperTitanKD model, the SuperTitan MAX features a wide range of heights and options for increasing strength and capacity.

STG Tower Series

The STG Series of towers offers excellent flexibility for a wide range of applications. An STG tower is available as a freestanding Self–Support Tower with heights up to 24m (50 feet), as a Bracketed Tower with heights up to 30m (100 feet) and as a Guyed Tower with heights up to 144m (350 feet). P.E. stamped drawings are available.





Titan Tower Series

The Titan is a versatile, modular, pre–engineered tower that requires a minimal footprint and is available in heights ranging from 4.8 to 29m (16 to 96 feet).

Assembled 96 foot Titan T-200 Self Support







www.polyphaser.com



IS-50NX-C2 DC Blocked Protector

Flange mounted, dc block, single transmitter coaxial lightning protection for 125MHz to 1GHz with N female connectors

IS-B50LN-C2 dc Blocked Protector

Bulkhead mounted, dc block, single transmitter coaxial lightning protection for 10 MHz to 1 GHz with N female connectors





WADE Antenna, Inc.

www.wadeantenna.com

Golden Nugget

Wade's galvanized steel 10 foot tubular Golden Nugget tower sections have precision swaged legs for perfect fit. The top section includes a rotor plate and 1.66" ID sleeve bearing. Designed to support equipment up to 3 ft² (0.28 m2) projected wind area, our GN is an economical off-air TV and wireless communications solution.

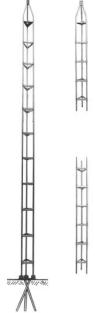
DMX

Our DMX standard duty towers are packaged complete with CBS concrete base stubs, DM mast, top plate, rotor plate, TMCA clamp assembly and all necessary hardware. Height includes mast.

Our medium & heavy duty towers are packaged complete with CBS concrete base stubs, top plate, rotor plate, 2 model 244A cast aluminum mast clamps and all necessary hardware. A mast is not included with these models.









Speakers





EFG502OD Indoor/Outdoor Background/foreground Speaker

Features

- Built-in Transformers
- U-mount Brackets Included
- "Ferrofluid" Cooled Tweeters
- Two -way Plastic Sealed Box
- Injected ABS Cabinet
- •

Applications

- Weather Resistant
- Retail Outlets
- Restaurants
- Lounges
- Patios
- Health Clubs
- Conference Rooms





EPCS502B 6.5" Premium Coax Ceiling Speaker

Features

- 5.5 inch Polyproplene woofer
- Neodymium dome tweeter
- Power selector knob
- Optional 8 ohm setting included
- Removable vent plug for extended frequency response
- Terminal strip terminated

- Office buildings
- Hotel lobbies
- Department Stores
- Restaurants





EPCS602B 6.0" Premium Coax Ceiling Speaker

Features

- EZIN system
- Blind mountable
- Complete system with back box
- Tuned port enclosure multi-tap 70 Volt or 8Ω direct

Applications

- Restaurants
- Churches
- Retail Outlets



E86CW 8" Loudspeaker

Features

- 6 oz. magnet & 1 inch voice coil
- 4-hole mounting to standard or traditional baffles
- Pre-punched holes for mounting a distribution transformer

- Commercial paging and background music
- Schools
- Retail Space
- Office Space







EBB8SS Series 8" square surface mount back box

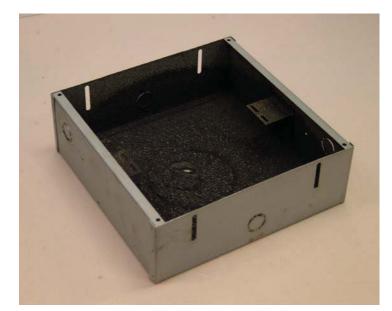
Features

- Surface Mount Backbox
- Finished White Enamel

Applications

- Office Buildings
- Hotel Lobbies
- Retail Buildings
- Restaurants





EBB8SF 8" square flush mount Back Box

Features

- Rust resistant 23 gauge electro-plated steel
- Inside coated with special damping material to eliminate mechanical resonance
- Adjustable mounting clips

- Office Buildings
- Hotel Lobbies
- Retail Buildings
- Restaurants





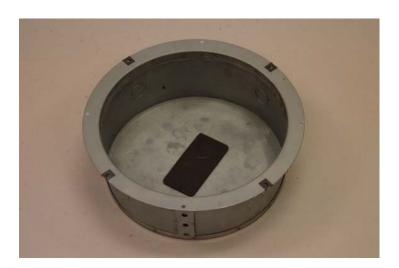
EBB8RF2 8" Round flush mount Back Boxes

Features

- Rust resistant heavy gauge electro-plated steel
- Inside coated with special material to eliminate mechanical resonance
- Adjustable mounting clips

Applications

- Office Buildings
- Hotel Lobbies
- Retail Buildings
- Restaurants





EBB8RCC 8" Round surface mount system

Features

- Surface Mount Backbox
- Finished White Enamel

- Office Buildings
- Hotel Lobbies
- Retail Buildings
- Restaurants





IN-BUILDING WIRELESS AND DISTRIBUTED ANTENNA SYSTEM (DAS)





coverage made simple

www.spotwave.com

The SpotCell 2500Xe Dual Band indoor wireless coverage system provides targeted coverage for spaces ranging up to 100,000 sq ft per system with a simple architecture consisting of aDonor Unit (typically mounted outside), coaxial cable, and indoor Coverage Unit(s). Additionally, the 2500Xe modules enables cost effective scaling from 5,000 to 100,000 square feet systems, to create larger or more complex coverage footprints.

Supporting 850 and 1900MHz Networks

The SpotCell[®] 2500Xe provides enhanced coverage for dual band 850MHz and 1900MHz networks, cost-effectively improving indoor coverage for voice and advanced data services.

- Supports both contiguous and non-contiguous blocks of spectrum in the 1900 MHz PCS band
- Unlike other products on the market, our carrier-specific programming ensures peak signal performance is attained and protects carrier networks from harmful interference.

Turn-Key and Powered by SpotCell® Technology Spotwave has combined smart antenna technology and advanced adaptive algorithms in the 2500Xe - creating the only truly intelligent indoor wireless coverage system. This unique adaptive capability of SpotCell® products eliminates much of the planning, design and engineering effort associated with conventional coverage approaches. Once the system is installed, the product automatically adjusts performance according to network

signal and isolation - no costly maintenance or adjustments are required. Systems come complete with everything required for rapid deployment including cable and heavy duty mounting hardware.

Field Upgradeable Personality Module™

SpotCell[®] 2500Xe products can be reconfigured through the optional Personality Module. This provides a simple means of reprogramming the unit on site to accommodate network changes.







coverage made simple

www.spotwave.com

The SpotCell 2000 series of digital repeaters provide the highest quality, reliability and "always-on" wireless in-building mobile coverage. The SpotCell 2000 Series includes two models: the SC2331Xf Tri-band, the SC2212Xf Dual-band and the SC2104Xf Single band repeater - all with 20 dBm of downlink power

Universal Network Support:

The SpotCell 2000* Series will support all Cell, GSM, HSPA, HSPA+ and LTE standards.

LTE 700 MHz CELL 850 MHz PCS 1900 MHz AWS 2100 MHz

Features:

- Digital repeater technology enables configurable sub-band filter bandwidths and frequencies.
- Available in multiple frequency band configurations (* last two digits of part number indicate the specific frequency bands supported by the digital repeater).
- Remote configuration and alarm monitoring capability via local interface or remotely via SMNP v2c or v3. or optional wireless modem
- High level of integration with built-in combiner/splitter for multi-band operation
- Auto-gain and shut-down function to ensure no interference to the network.
- Sub band defined repeater for enhanced performance for specific wireless carrier networks.
- Wireless Carrier compliant solution.

Coverage Area:

The SpotCell 2000 Series addresses coverage problems typically from 5,000 – 25,000 square feet.







G-WAVE Solutions is an ISO9001:2008 certified, high-tech engineering and manufacturing company specializing in system design and assembly for commercial, military, telecommunications, test and measurement and custom applications.

G-WAVE Solutions designs and manufactures wireless signal enhancement systems such as Bi-Directional Amplifiers, Tower Mounted Amplifiers, and Public Safety/LMR systems for indoor and outdoor applications in VHF, UHF, 700/800/900 MHz, as well as cellular frequency bands. G-WAVE¹s technical and sales teams are proficient in Public Safety required solutions and are capable of designing/manufacturing rugged and reliable DAS products and systems to meet both the customers¹ and Public Safety Agencies¹ requirements whilst maintaining Industry Leading delivery schedules.







www.surecall.com

Fusion5X Signal Booster



Overview

Designed for offices or buildings up to 20,000 square feet, the Fusion5X Booster enhances voice, text, and 4G LTE data for all North American carriers. Configurable for all indoor environments, the Fusion5X provides clarity and increased data speed for 20+ simultaneous users.

Features and Benefits

- Reduces dropped and missed calls and improves 4G LTE data speeds
- Durable metal housing provides long -term reliability
- automatic dB gain/attenuation optimizes booster and performance without dils
- Best-in-Industry three-year warranty
- FCC approved for use with all major U.S. carriers
- Compatible with SureCall Sentry remote monitoring system





Broadband and IP Devices





www.cambiumnetworks.com

	PTP450	PTP650L	PTP650S	PTP650
Frequency Bands	3.5Ghz 3.65Ghz 5.4/5.8Ghz	4.9 – 6.05 Ghz	4.9 – 6.05 Ghz	4.9 – 6.05 Ghz
Max Aggregate Capacity	125 Mbps	100 / 300 Mbps	450 Mbps	450 Mbps
Range	Up to 40 Km	Up to 200 Km	Up to 2 Km (Upgrade to 200 Km)	Up to 200 Km
Latency (One Way)	3 - 5 ms	1 - 3 ms	1 - 3 ms	1 - 3 ms
Spectral Efficieny / Channel Bandwidths	6.25 bps/Hz 5/10/20 Mhz	10 bps/Hz 5/10 (15/20/30) Mhz	10 bps/Hz 5/10/15/20 /30/40/45 Mhz	10 bps/Hz 5/10/15/20 /30/40/45 Mhz
TDD Syncronization	Yes	Yes	Yes	Yes
Ruggedization	IP55	IP66/67	IP66/67	IP66/67
Security	128-bit AES https / SNMPv3	128-bit / 256-bit AES https / SNMPv3	128-bit / 256-bit AES https / SNMPv3	128-bit / 256-bit AES https / SNMPv3
Other Features	QoS (2 levels) Up to 85/15 TDD Ratio	Dynamic Spectrum Optimization (DSO), QoS (8 levels), 1588v2, SyncE, 4G/LTE Ready (650S and 650 Only), Fiber/SFP, IPv4 / IPv6, 802.3af, PoE Output, OOBM, 9600 byte frames, T1/E1 TDM Option, Adap- tive Symmetry		
Link Planner Support	Yes	Yes	Yes	Yes





www.cambiumnetworks.com

WIRELESS BACKHAUL SUB-6 GHZ Point-to-Point Solutions

Backhaul links are the vital infrastructure that connects the network. You need confidence that your solution will work regardless of the conditions. Cambium point-to-point (PTP) sub-6 GHz links perform so that you can focus on your business.

PTP solutions can be selected with features to provide long-range, high-capacity throughput in Line of Sight (LOS), near Line of Sight (nLOS), or Non Line of Sight (NLOS) applications. Our solutions are designed with industry leading Mean Time Between Failure (MTBF) performance and have a cumulative 3 billion operational field hours worldwide.

Leased Line Replacement – PTP links are ideal to eliminate the recurring costs of leased circuits, often providing an ROI in a matter of a few months. Links can be created to provide primary or backup service.

Network Infrastructure – Whether it's for a business campus, multiple government offices, extending a fiber network, or a backbone for a network providing residential access, PTP links provide high capacity throughput to bring connectivity to a new location.

Disaster Recovery – Communications are vital in the wake of a disaster. When communications are wiped out, PTP links can be rapidly deployed to provide video, voice, and data services to support recovery teams and families in need.



PTP 450



PTP 650L



PTP 650



PTP 650S

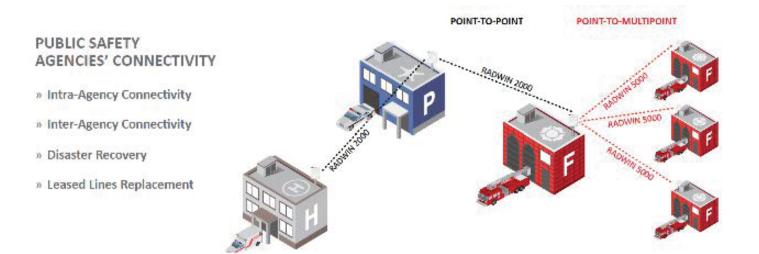




www.radwin.com

Wireless Security Solutions

To enhance security and public safety, more and more organizations such as public safety agencies, municipalities and enterprises are turning to wireless broadband technology and advanced security applications. RADWIN's wireless Point-to-Point and Point-to-MultiPoint broadband solutions support high-bandwidth security applications that require assured performance and guaranteed ban width. RADWIN provides a complete wireless broadband solution for security projects including safe cities, public safety agency connectivity, multi-site video surveillance, traffic management, Land Mobile Radio backhaul and border control. By deploying RADWIN's solutions, public safety agencies and organizations can enhance performance, lower the total cost of ownership and meet budget constraints.





RADWIN

www.radwin.com

Technical Data

	Radwin 5000/Jet	Radwin 2000	
Туре	Point to Multipoint	Point to Point	
Net Capacity	Base Station : 50Mbps, 250Mbps, 750Mbps Subscriber : 10Mbps, 25Mbps, 50Mbps, 100Mbps, 250Mbps	750Mbps Radwin D+ 10Mbps, 25Mbps, 50Mbps, 100Mbps, 200Mbps Radwin A, B, C	
Service	Ethernet	Ethernet / T1	
Range	Up to 40 Km	Up to 120 Km	
Frequency Bands	2.3 to 2.7Ghz 3.3 to 3.8Ghz 4.9 to 6.4Ghz	2.3 to 2.7Ghz 3.3 to 3.8Ghz 4.9 to 6.4Ghz	
OFDM	Supported	Supported	
MIMO / Diversity	Supported	Supported	
nLOS and NLOS Operation	Supported	Supported	
Latency	4 to 10 ms	< 3 ms	
TDD Sync	Intra-Site and Inter-Site using GPS		







LiteBeam[™] ac AP

2x2 MIMO airMAX[®] ac Sector AP 5GHZ 450+ MBPS

LiteBeam[™] ac

2x2 MIMO airMAX® ac CPE 5GHZ 450+ MBPS

NanoBeam[™] ac AP

High-Performance airMAX[®] ac Bridge 5GHZ 450+ MBPS 15+ km RANGE

PowerBeam[™] ac

High-Performance airMAX° ac Bridge 5GHZ 450+ MBPS 30+ km RANGE

PowerBeam[™] ac ISO

5 GHz air MAX° ac Bridge with RF Isolated Reflector















Rocket5ac Prism

airMAX[®] ac BaseStation with airPrism[®] Technology

Rocket[™]ac

airMAX®ac BaseStation 5GHZ 500+ MBPS

RocketDish[™] ac Antenna

airMAX[®] ac 2x2 PtP Bridge Dish Antenna 5GHZ

airMAX[®] ac Sector Antenna

airMAX[®] ac 2x2 BaseStation Sector Antenna 5GHZ

airPrism[®] Sector Antenna

5 GHz, 3x30° HD Sector Antenna 5GHZ

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UniFi[®] AP AC LITE

802.11ac Dual Radio Access Point 2.4 GHZ 5 GHZ 300 Mbps 867 Mbps

UniFi[®] AP AC LR

802.11ac Long Range Access Point 2.4 GHZ 5 GHZ 300 Mbps 867 Mbps

UniFi® AP AC PRO

802.11ac PRO Access Point 2.4 GHZ 5 GHZ 450 Mbps 1300 Mbps

UniFi[®] AP AC EDU

802.11ac Dual-Radio AP with Public Address System 2.4 GHZ 5 GHZ 450 Mbps 1300 Mbps













UniFi AP In-Wall

In-Wall Wi-Fi Access Point 2.4GHZ 300 Mbps

UniFi[®] Mesh AP

Outdoor 802.11ac Access Point and Mesh Node 2.4 GHZ 5 GHZ 300 Mbps 867 Mbps

UniFi[®] Mesh AP Pro

Outdoor 802.11ac Access Point and Mesh Node 2.4 GHZ 5 GHZ 450 Mbps 1300 Mbps

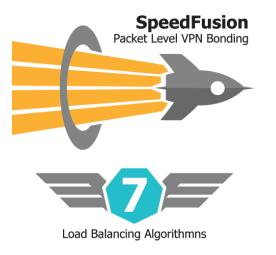
UniFi[®] Cloud Key

Hybrid Cloud Device Management









A Leader in WAN Virtualization

Peplink's product and technology focus has always been on WAN virtualization and the intelligent use of multiple WAN links at the same time to increase reliability and bandwidth whilst reducing costs. They have two key WAN virtualization technologies, Intelligent load balancing for Internet access and SpeedFusion VPN Bonding for secure branch to branch connectivity.



Peplink Balance Series Routers

From straightforward yet powerful dual-WAN routers for small offices, all the way to SFP+ capable 12-WAN enterprise routers, the Balance series has an ideal fit for any fixed line deployment.

Some models also feature WAN capable USB port for 3G/4G Modems.







Peplink Max Series Routers

The MAX series of industrial 4G routers are designed to provide secure WAN access in environments where wired solutions are too expensive to deploy. The MAX series feature GPS fleet tracking, serial-to-IP terminal services, VPN security, and a wide temperature range.



Peplink AP One Series Access Points

The Pepwave AP One access point series delivers enterprise-grade performance, the flexibility to deploy anywhere, and easy setup and management. From the tiny but mighty AP One In-Wall to the super-tough AP One Flex, the AP One series offers fast, secure, long-range Wi-Fi that goes wherever you do.



Peplink's MediaFast Series Routers

MediaFast is their supercharged content caching solution. Designed with education and entertainment in mind, it downloads and accelerates video, iTunes U, iOS updates, app downloads, and other content for uninterrupted learning and fun anytime. The MediaFast can prefetch content during off-peak hours, saving connectivity costs and reducing network burden during busy times.





www.calamp.com

A proven leader in the mobile resource management (MRM) and machine-to-machine (M2M) space, CalAmp connects clients to business-critical data and transforms it into actionable intelligence for people, systems and machines.





Security Solutions





www.specotech.com

For over fifty years, Speco Technologies has dedicated themselves to providing the latest innovations in video surveillance and electronic accessories, as well as the highest quality audio products for residential and commercial use. They are committed to providing affordable, dependable merchandise, delivering exceptional customer service, and offering extensive product training, technical and marketing support. Speco Technologies offers complete video surveillance solutions from their full featured SecureGuard® Video Management Software to their advanced Flexible Intensifier® technology cameras.







UBIQUITI[®] N E T W O R K S

www.ubnt.com



UniFi[®] Video G3 Camera

1080p Full HD 30FPS EFL 3.6mm, f/1.8 Outdoor Weather Resistant Built in Microphone Built in IR



UniFi[®] Video G3 Dome Camera

1080p Full HD 30FPS EFL 2.8mm, f/2.0 Indoor Rated Built in Microphone Wide Angle Built in IR

UniFi[®] Video NVR

Preinstalled Unifi Video Software 500Gb Harddrive Low Power Consumption







Top 10 Product Listings





www.pctel.com

	PCTCNMFT 118-940 MHz, UNITY GAIN, 1/4 WAVE, MOBILE, N/A CONNECTOR
	The PCTCN chrome nut antennas optimize bandwidth perfor- mance. It offers a durable super flexible design and reinforced brass button contact.
	MAX-PCTCNMFT
	NMO58UNC 3/4", THRU-HOLE MOUNTS, 17', RG-58/U, MOBILE ANT MT, NO CONNECTOR, N/A The NMO58AU-NC is an all brass NMO style series with Gold contact pin and brass nut ring mount. It features 17 ft of RG58U cable but no connector. It install from above.
	MAX-NMO58U-NC
	NMO58AUNC 3/4", THRU-HOLE MOUNTS, 17', RG-58/U, MOBILE ANT MT, NO CONNECTOR, N/A The NMO58AU-NC is an all brass NMO style series with Gold contact pin and brass nut ring mount. It features 17 ft of RG58 AU cable but no connector. It installs from above. MAX-NMO58AU-NC
	GCC52204P1A 3-1/4", MAGNET MOUNTS, MOBILE ANT MT, UHF, (M), G SERIES ANTENNA MOUNT TYPE, 1
	MAX-GCC-52-204-P1-A
	MHB5800 144-174 MHz, 3 DBD GAIN, 5/8 WAVELENGTH, MOBILE, N/A CONNECTOR
	5/8 wave base loaded field tunable 3db gain mobile antenna.
<u></u>	MAX-MHB-5800

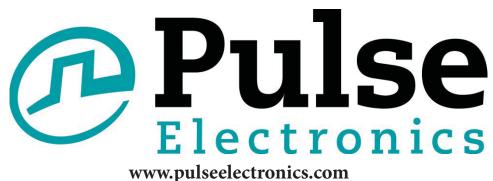




www.pctel.com

GPL 3-1/4", MAGNET MOUNTS, MOBILE ANT MT, MINI UHF, (M), G SERIES ANTENNA MOUNT TYPE, 12'G magnetic mount series with 12 ft RG58A/U cable a mini UHF male connector.
MAX-GPL
MLPV800 806-960 MHz, 1 DBD GAIN, LOW PROFILE, MOBILE, N/A CONNECTOR
MAX-MLPV800
MBMNC MBM Series, MOBILE ANT MT, N/A CONNECTOR, MIRROR
MWV1322HD 132-174 MHz, 2.4 DBD GAIN, 1/4 WAVE, MOBILE, N/A CONNECTOR
MAX-MWV1322HD
PLTE7027M DUAL POLARIZATION 4G LTE MIMO DIRECTION PANEL MAX-PLTE7027M



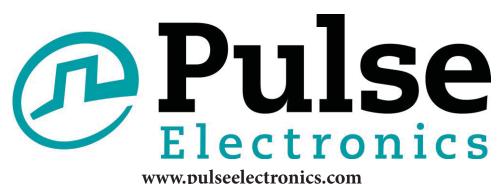


ICEFINLNMOHF 698-960MHZ, 1710 - 2700MHZ DUAL BAND ANTENNA WITH NMO + HF CONNECTOR LAR-ICEFINLNMOHF NMO5T900B 890-960 MHz, 5 DBD GAIN, 5/8 OVER 1/4 WAVELENGTH, MOBILE, N/A CONNECTOR LAR-NMO5T900B NMOKHFUD 3/4", THRU-HOLE MOUNTS, 17', RG-58/U, MO-BILE ANT MT, NO CONNECTOR, N/A LAR-NMOKHFUD Q 136-512 MHz, UNITY GAIN, 1/4 WAVE, MOBILE, N/A **CONNECTOR** LAR-Q



LAR-NMO-CAP-B

NMOCAPB rain cap, NMO MOUNTS, 1



www.puiseciectionics.com			
	KD22VHF3 150-161 MHz, UNITY GAIN, N/A WAVELENGTH, PORTABLE, 5/16-24 THDS(F) - YELLOW CAP LAR-KD22VHF3		
	NMOKDS 3/4", THRU-HOLE MOUNTS, 17', RG-58/U, MOBILE ANT MT, NO CONNECTOR, N/A LAR-NMO-K-DS		
	NMO150BCO 144-174 MHz, USED ON NMO-150, 3/4" HOLE MOUNT LAR-NMO-150-BCO		
	TMB34 3/4", MOBILE MOUNT BRACKETS, CHROME, 2-1/8" X 2-1/8", TRUNK GUTTER BRACKET LAR-TMB-34		
	PL259 UHF, (M), STRAIGHT, RG-58, SOLDER		





	RFU505 UHF, (M), STRAIGHT, RG58, LMR-195, CRIMP UHF, MALE CRIMP, N,S,B; FOR RG-58/U & LMR-200, CBL GRP C,C2
	RFI-RFU-505
	RFU6001 mini UHF, (M), STRAIGHT, RG58, LMR-195, CRIMP M-UHF, MALE CRIMP, AMP TYPE, N,G,D; FOR RG-58/U, CBL GRP C
(All and a second se	RFI-RFU-600-1
	RFN10222SR2 N, (F), BULKHEAD, RG-402/U, BEL-1673A, DIRECT SOLDER N, FEM BLKHD, REAR MNT, DBL D-FLAT; S,G,T; SEMI-RIGID .141, SR2 RFI-RFN-1022-2SR2
	RFN10063I N, (M), STRAIGHT, LMR-400, 9913, CRIMP N, MALE CRIMP, S,G,T; FOR RG-8/U TYPE, LMR-400 & BELDEN 9913, CBL GRP I
	RFI-RFN-1006-3I
	PT401503BK strain relief, FOR CONNECTOR RG-58/U CABLE - BLACK, PVC, CONNECTORS, REPLACEMEN STRAIN RELIEF FOR RG-58/U, BLACK, PVC
	RFI-PT-4015-03-BK





	RFU6006 mini UHF, (M), STRAIGHT, RG58, LMR-195, CRIMP M-UHF, MALE CRIMP, MACH. BODY, N,S,D; FOR RG-58/U, CBL GRP C
	RFI-RFU-600-6
C THE MAN	RFB11062 BNC, (M), STRAIGHT, RG58, LMR-195, CRIMP BNC MALE CRIMP PLUG, N,G,D; FOR RG58/U, CBL GRP C
	RFI-RFB-1106-2
	RFN10053C N, (M), STRAIGHT, LMR-195, RG-58, CRIMP N, MALE CRIMP, S,G,T; FOR RG-58/U, CBL GRP C
	RFI-RFN-1005-3C
	RFN10063F N, (M), STRAIGHT, RG-214/U, RG-9/U, CRIMP N, MALE CRIMP, S,G,T; FOR RG-9/U, CBL GRP F
	RFI-RFN-1006-3F
	RFT12022 TNC, (M), STRAIGHT, RG58, LMR-195, CRIMP TNC, MALE CRIMP, N,G,D; FOR RG-58/U, CBL GRP C
	RFI-RFT-1202-2





www.tccinc.com

	1203F1DGN mini UHF, (M), STRAIGHT, RG-58A/U, CRIMP
	TCC-12-03F-1-DGN
	1703F7DNN UHF, (M), STRAIGHT, RG-58A/U, CRIMP
	TCC-17-03F-7-DNN
	1111F3TGN N, (M), STRAIGHT, RG58/U, CRIMP
•	TCC-11-11F-3-TGN
	1903F1TGN SMA, (M), STRAIGHT, RG-58A/U, CRIMP
	TCC-19-03F-1-TGN
	1111T3TGN N, (M), STRAIGHT, LMR-400, CRIMP TCC-11-11T-3-TGN





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15-10F-1-TGN TNC, (M), STRAIGHT, RG-58A/U, CRIMP
TCC-15-10F-1-TGN
1310FDGN BNC, (M), STRAIGHT, RG58A/U, CRIMP
TCC-13-10F-DGN
1111C3TGN N, (M), STRAIGHT, RG-9B/U, CRIMP TCC-11-11C-3-TGN
1732FDGN UHF, (F), STRAIGHT, RG-58A/U, CRIMP TCC-17-32F-DGN
38CP10F3S cigarette lighter plug, PLUG ONLY, CONNECTORS, CABLE CONNECTOR ACCESSORIES
TCC-38-CP-10F3S





Value Added Services				
 Bundling Kitting Just In Time Delivery (JIT) Cable Processing Logistics (3PL) 	 Connector Attachment Jumper Assembly PIM Tested Power System Solutions 	 Engineering Support In-Building Design Path Analysis Mesh Design Training 	 Leasing Trade-In Program New or Used Equipment 	

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Mobile Mark	Westell - CSI		ennas	Panorama Antennas PCTEL	
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True More De	adio Accessories	Easy Up	RF Industries	Signal Inside	
A.W. Enterprises Case-Tech Comprod Connect Systems Inc CPI dbSpectra	iTech Midian Panavise Speco TECHNI-TOOL INC. Zetron	Hammond Harger Huber & Suhner Multilink Lightning Protect	ROHN Signal Inside Trylon ction / Grounding	Amplifiers/Repeaters G-Wave Solutions Surecall - <i>Cellphone Mate</i> Spotwave Wireless weBoost - <i>Wilson</i>	
GAI-Tronics Gamber Johnson		Huber + Suhner Smiths Group - Polyphaser & Transtector	Times Microwave Ubiquiti Networks		
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Amplifiers 8	k Filter Products				
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