DB Systems LLC

Product Catalog

PBX Systems Product Line Card

Amplifiers Algoni Powerwave Andrew Wireless Solutions (Wireless Innovation Group (WIG)) Cellular Specialties. Cresend dbSpectra Antennas AC Marine Advanced Antenna Airaya Algon/Powerwave Andrew Wireless Solutions (Decibel EMS) Antal ARC Wireless Astron Wireless Technologies Cellular Specialties

Gabriel Hustler Hyperlink KMW Antennas Kathrein/Scala Laird Technologies (Antenex, Centurian, Cushcraft Pacific Wimiess Larsen Mars Antennas Mobile Mark PCTEL (Antenna Specialist, Maxrad) Radio Frequency Systems (RFS) Celwave Radio Waves Telewave

Connectors & Adapters Andrew Wireless Solutions

Anritsu Bird Huber+Subner

Tech

Ceragon Networks

Cielo Networks

Camprod

Comtelco

dbSpectra

DragonWave

EION Wireless

Chargers, Conditioners & Analyzers
BP Solar

Cable & Jumpers Andrew Wireless Solutions American Terminal

CommScope Huber+Suhner SAT-PAK

Duplexers, Filters & Combiners Allgon/Powerwave Andrew Wireless Solutions (WIG) Annitsu

Cellular Specialties Com-Nav Comprod

Enclosures, Racks & Mounts

ADS **Bud Industries** Direct Power & Water

Fixed Broadband -Wireless/Microwave/Broadband Accessories

Adtren Andrew Wireless Solutions **BridgeWave** Ceragon Networks Cielo Networks Cyclone DragonWave **EICN Wireless** Engenius

Inscape Data (QinVision Micro Tik Motorola Nera Frozim RAD Data Teletronics Tranzeo

Installation Accessories

American Terminal Andrew Wireless Solutions

Inverters Astron Exeltach ICT Newman

GPS GPS Networking

Larsen

Lighting Protection/Grounding Andrew Wireless Solutions Harger Huber-Suhner

Black Box

Tranzen Wireless Beenive

Dekolink

Hyperlink

Teletronics Telewave

EMR

RF Industries Telewaye

Times Microwave Systems

Trilogy

Xantrex

RF Industries RFS Cablewave

Times Microwave Systems

dbSpectra EMR. Microlab(FXR RFS Cableware

Telewave

Gambler-Johnson

PanaVise. UniRac

PolyPhaser TrippLite

Power-Sonic

WKW

SunWise.

Two Seas

UniRac

Xantrex

Universal Battery

Specialty Concepts

Valmont

Samlek

TrippLite

Xantrex

Times Microwave Systems

PC Accessories Network Technologies Inc (NTI)

Portable Batteries East Penn **GNB Battery GL** Batteries Honeywell Batteries

Power Systems BP Solar DPW Morningstar Power Sonic Sharp Electronics

Power Supplies Astron Newmar DuraComm Samlex TrippLite

Radios & Radio Accessories ACT

RF Inquistries **GPI** Speco GAI-Tronics Teledesign Gambler-Johnson Vertex Standard Tech Nova WaW PanaVise.

Survey Hardware Crain

Tools Andrew Wireless Solutions Klein Tocia

Test Equipment Annitsu

Tower & Site Equipment Andrew Wireless Solutions (Decibel, Steel Products)

Bud Industries Easy Up Harger Huber+Suhner

Bird

UPS Systems Exeltech Newmar

RFS Cablewave

Times Microwave Systems

PolyPhaser Radian/Rohn Bichard Tell Trylon

Valmont

Tolowaye

TrippLite Xantrex



PBX Systems Table of Contents

Adapters	17
Amplifiers	5
Antenna Cable	10
Antenna Kits	6
Antenna Mounts	6
Antennas	13-14
Backpacks & Bags	3
Bulk Coax Cable	10
Cable Assemblies	7-9
Data Logger	22
Fiber Cable	15
Gender Changers	18
GPS Amplifiers	20
GPS Antennas and Mounts	20
GPS Miscellaneous	21
Lemo Connectors	18
Lightning Protectors	13
Network Cables	15-16
Optical Cables	16-17
Prism Poles	3
Prisms	3
Radio Cables	5
Radio Equipment	4
Radio Filters	4
RF Adapter Cables	4
RF Connectors	11-12
Shallow Water RFID System	22
Splitters	19
Survey Miscellaneous	6
Tools for Connectors	12
Tribrachs	3
Tripods	3

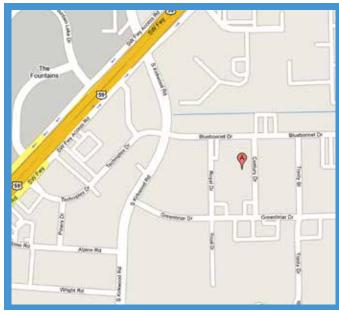
Welcome to PBX Systems LLC and our latest Product Catalog! In this, our 9th year of business, we are proud to offer a growing list of field proven products to help your company improve productivity and efficiency.

The purpose of this catalog is two-fold:

First, we hope that this publication will help to keep our existing customers current with our growing product portfolio.

Secondly, this catalog will introduce our new clients to a range of proven products that we've been selling to both large corporations as well as smaller companies for the last nine years.

Why buy from PBX Systems LLC? That's an easy question to answer! We know the equipment that we sell and we stand behind every order! Also, we ensure that our mission critical products come with 24/7 support.



12710 Century Drive | Stafford, Texas 77477

Our personnel have been either building, using, selling or designing GPS, data radios, RFID and embedded computer technology for a combined 215 years...and this includes development work on a GPS unit that's now sitting in the Smithsonian! We understand the technology that you're using to survey, position, log data and conduct seismic surveys. We'll work with you to ensure complete satisfaction with your order.

In these pages you'll find telemetry products, specialized interface cables, rugged packaging solutions, antennas, coaxial cables and lots more.

Specialized marine seismic hardware includes PosNet rGPS, tailbuoy power supplies, rugged RFID hardware and in-water tension monitoring systems.

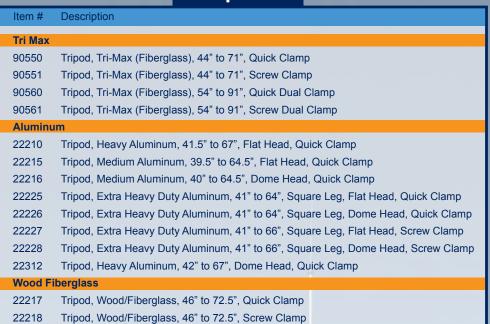
Our growing line of product partners includes Teledesign Systems Inc. and their wireless modems, GPS Networking Inc. splitters, antennas, mounts and other GPS accessories, NTI's line of industrial KVM products, DVI/HDMI extenders and TIRIS compatible RFID hardware.

If you have questions either about our products or applications, call or e-mail us and we'll give you answers right away!

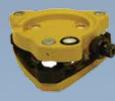
Call us toll free at 1-866-763-2994.

Tripods









Prism Poles

Item #	Description
90200	Prism Pole, 15' Composilite (Fiberglass).
90201	Prism Pole, 15' Alumilite (Aluminum).
90202	Prism Pole, 15' Carbonlite (Carbon).
90203	Prism Pole, 15' Carbonlite/ Alumilite.
90276	Prism Pole, 8' Alumilite (Aluminum).
90279	Prism Pole, 8' Carbonlite/Alumilite.
90280	Prism Pole, 8' Composilite (Fiberglass).
90281	Prism Pole, 8' Carbonlite (Carbon).
90282	Prism Pole, 12' Composilite (Fiberglass).
90283	Prism Pole, 12' Carbonlite (Carbon).
90284	Prism Pole, 12' Carbonlite/Alumilite.
90287	Prism Pole, 12' Alumilite (Aluminum).

Backpacks & Bags

	Item #	Description
	We hav	ve a full line of bags and cases for surveying and GPS.
	A samp	ole is listed below.
	91472	GPS Backpack w/Dual Antenna Poles
	91465	GPS Back Pack
	91480	GPS Battery Case
	91435	19" Stake Bag – Rhinotek
	91440	37" Lath Bag
	91458	Single Prism Bag
	91462	Total Station Bag – Top Loading
١,	91483	Total Station Bag – Front Loading
	91463	Multi-Purpose Field Bag
	91471	Padded Prism Pole Case

Prisms

Item #	Description
25570	Prism, Rotatable Adapter
25574	Prism, Heavy Duty Single Tilting, Yellow Target
25575	Prism, Heavy Duty Single Tilting, Orange Target

Tribrachs

-	1000000	
	Item #	Description
	25580	Tribrach w/Optical Plummet, color Gray
	25581	Tribrach w/Optical Plummet, color Yellow
	20001	Thorach Wepada Flammot, color rollow
	25582	Tribrach w/Optical Plummet, color Black

Increase the range of your backpack radio.... Ask us about an antenna Maximizer!!









Frequency Ranges (MHz)

132-150 150-174	VHF
380-403 403-419 419-435 435-451 450-470 464-480 480-496 496-512	UHF

To prolong the life of your data radio, remember to keep an eye on the amount of data you transmit. Most radios are rated to transmit about 35-50% of the time. This is the "duty cycle". If you transmit data for half a second you should wait half a second for the next cycle. GPS users listen up! If you transmit either RTK or DGPS data (or both!) then try to schedule output no more often than every two seconds and not the default one second rate. Your power amplifier will appreciate this and, if you're running off batteries, you'll extend your operating time too!

Radio Equipment

Item#	Description
TS4000-02A45SBB	Teledesign Systems Inc UHF Data radio, 450-470Mhz, 99 Ch, 19200bps, 2W, BNC
	connector, DE-9 data I/O, 13.5VDC, RS-232 input, supplied with power plug, setup software
	& manual
TS4000-02A45WTB	Teledesign Systems Inc UHF Data radio, 450-470Mhz, 99 Ch, 19200bps, 2W, TNC
	connector, Lemo data I/O 13.5VDC, RS-232 input, supplied with setup software & manual.**
	Requires Lemo - RS-232 programming cable (TS0360AGU)
TS4000-05B45SBB	Teledesign Systems Inc UHF Data radio, 450-470Mhz, 99 Ch, 19200bps, 5W, BNC
	connector, DE-9 data I/O,13.5VDC, RS-232 input, supplied with power plug, setup software
	& manual.
TS4000-05B45WTB	Teledesign Systems Inc UHF Data radio, 450-470Mhz, 99 Ch, 19200bps, 5W, TNC
	connector, Lemo data I/O 13.5VDC, RS-232 input, supplied with setup software & manual.**
	Requires Lemo - RS-232 programming cable (TS0360AGU)
TS4000-05C15SBB	Teledesign Systems Inc VHF Data radio, 150-174Mhz, 99 Ch, 19200bps, 5W, BNC
	connector, DE-9 data I/O,13.5VDC, RS-232 input, supplied with power plug, setup software &
	manual
TS4000-05C15WTB	Teledesign Systems Inc VHF Data radio, 150-174Mhz, 99 Ch, 19200bps, 5W, TNC
	connector, Lemo data I/O 13.5VDC, RS-232 input, supplied with setup software & manual.**
	Requires Lemo - RS-232 programming cable (TS0360AGU)
FGR115RC	FreeWave 900MHz Radio.
11-144/146	Teletronics 5.8GHz Wireless Ethernet Bridge.
54080-01	TS4000 Power Supply, 12 VDC out, 110V-240V AC in
KS1-EH900	NovaRoam 900MHz Ethernet Stationary Kit. Kit includes NovaRoam, Ethernet cable, and
	Wall Plug Power Supply.
Teletronics' TT2400	High Power 2.4GHz 802.11b/g AP/Bridge/CPE 250mW

RF Adapter Cables

_	
Item #	Description
16-319	Reverse TNC(M) to N(M), 1 foot .
16-337	TNC(M) to N(M), 1 foot.

Radio Filters

Item#	Description
6BCV4-2412/26C-N	ComNav 6 pole cross coupled cavity filter. Center frequency 2412 MHz.
6BCV4-2442/26C-N	ComNav 6 pole cross coupled cavity filter. Center frequency 2442 MHz.
6BCV4-2472/26C-N	ComNav 6 pole cross coupled cavity filter. Center frequency 2472 MHz.

Which radios do you need a license to operate? The 900Mhz and 2.4Ghz belong in the I.S.M. (Industrial, Scientific and Medical) band and, out of the box, are license free. So what's the catch? Well, as a rule, range can be limited especially in built-up areas. Also, the majority of users transmit using ISM equipment and so local interference can be an issue. If you can tolerate reduced bandwidth and also interface to

TS4000

the radios using a serial data port then UHF or VHF might be the answer. UHF and VHF do need a government license. This is normally a straight forward procedure and one that we can help you with. Note that the VHF band is normally quiet inland but noisy offshore. Range is typically very good. UHF will usually work both on and offshore with slightly reduced range.







Radio Cables

Item #	Description
Built by PBX Sy	ystems
54530-00	Trimble 4700/4800/5700 to Teledesign TS4000 modem / PWR cable , Lemo 0B-7 (M) to DE9 (M) w/ open ends for power, 3'.
54960-00	Teledesign RF Adapter cable, BNC(M) to TNC(F), 6'.
55630-00	Trimble 4700/4800/5700 R/A to Teledesign TS4000 (watertight case) rover cable with power, Lemo 0B-7(M) R/A to Lemo 2B-19
	(M) with 2 pin SAE, 3'
55640-00	Trimble 4700/4800/5700 R/A to Teledesign TS4000 (watertight case) base cable with power, Lemo 0B-7(M) R/A to Lemo 2B-19
	(M) with 2 pin SAE, 6'
56280-00	Teledesign TS4000 standard case to antenna cable , BNC(M) to N(M) on 3' of RG58 cable.
56370-00	Teledesign TS4000 watertight case to antenna cable, TNC(M) to TNC(M) on 33' of RG58 cable.
56490-00	Teledesign TS4000 power cable with fuse holder, 2 pin SAE to 1/2 inch lugs w/Fuse Holder, 6'.
56800-00	Teledesign TS4000 (watertight case) to PC programming cable with power, Lemo 2B-19 (M) to DE9 (F) with 2 pin SAE, 3'.
58170-00	Trimble 4700/4800/5700 base to Teledesign TS4000 Watertight Case Cable , Lemo 0B-7(M) R/A to Lemo 2B-19(M) with 2 pin
	SAE, 6'.
58320-00	Trimble 4700/4800/5700 rover to Teledesign TS4000 Watertight Case Cable, Lemo 0B-7(M) to Lemo 2B-19(M), 6'.
TS0360AGU	Teledesign TS4000 Programming Cable for watertight case, Lemo 2B-19(M) to DE9(M) w/SAE for power, 3'. (built by Teledesign)

Amplifiers

Item #	Description
Teletronics - Fo	or military use or export only
12-101	Teletronics 900MHz Smart Amp, 1 watt, outdoor case.
12-105	Teletronics 900 MHz SmartAmp, 5 watt, outdoor case.
12-206	Teletronics 2.4GHz SmartAmp, 1 watt, outdoor case.
12-207	Teletronics 2.4GHz SmartAmp, 5 watt, outdoor case.
12-505	Teletronics 5.8GHz SmartAmp, 1 watt, outdoor case.
UHF/VHF	
PA3-1AC-N	Amplifier, VHF Power amplifier, 1 - 4 watts in, 30-45 watts out, 13.6VDC at 8A, for GPS
	base station. Use w/Teledesign or Pac-Crest radio. Comes with power cord and radio jumper cable.
PA6-1AC-N	Amplifier, UHF Power amplifier, 1 - 4 watts in, 30-45 watts out, 13.6VDC at 8A, for GPS
Jan 1975	base station. Use w/Teledesign or Pac-Crest radio. Comes with power cord and radio jumper cable.
Hyperlink - For	military use or export only
HA2406T-NF	2.4 to 2.5 GHZ Amplifier, 6 Watt with N type Female Connectors.
HA2410T-NF	2.4 to 2.5 GHZ Amplifier, 10 Watt with N type Female Connectors.
HA910-APC	902-926 MHz Amplifier, 10 Watt.

The secrets to trouble free radio communications are to keep the equipment as cool as possible and ensure that you have a good battery/power source and well kept cables! Make a habit of inspecting the cables and connectors. If radio connectors are loose and rotate on the cable or you can see braid sticking out the back of them, get the cables checked! PBX will do this for free! Just give us a call...





Antenna Kits

Item #	Description
RAKUHF	Teledesign Systems Inc UHF Rover Antenna Kit includes range pole Maximizer Antenna mount and Omni-Directional 5dBi gain 33 inch whip antenna. Select BNC or TNC
RAKVHF	connectors for 1.5 meter antenna cable. Teledesign Systems Inc VHF Rover Antenna Kit includes range pole Maximizer Antenna mount and Omni-Directional 3dBi gain 49 inch whip antenna. Select BNC or TNC connectors for 1.5 meter antenna cable.
PBX450	Colinear Antenna, 450-470 MHz, 5dB, field tunable (mounts on PBX340 range pole)

Antenna Mounts

٠,		COP 75- 1 (1)		
	Item #	Description		
	UHF, range pole	e mounts, 5/8-11		
	PBX340R/B,	Rover, 1.5m cable with BNC		
	PBX340R/T,	Rover, 1.5m cable with TNC		
ı	PBX340B/B,	Base, 4.5m cable with BNC		
	PBX340B/T,	Base, 4.5m cable with TNC		
1	PBX340G/T,	Base, 7.6m cable, with TNC		
ĺ	VHF, range pole mounts, 5/8-11			
Ž	PBX341R/B,	Rover, 1.5m cable with BNC		
	PBX341R/T,	Rover, 1.5m cable with TNC		
	PBX341B/B,	Base, 4.5m cable with BNC		
1	PBX341B/T,	Base, 4.5m cable with TNC		
d				

Survey Miscellaneous

Item #	Description
AD251	GPS antenna, L1 only, N type Female connector.
AD410	GPS Antenna, L1/L2
57860- <mark>00</mark>	Trimble Navigation Ltd Trimble Bullett III GPS Antenna w/TNC connector
Batteries	
TRB-2	Lithium Ion 2.4Ah 7.4V for use in Trimble TSC-1 and 5700 GPS Receivers
543 <mark>44</mark> -00	Trimble Battery for 5700 and TSC1.



Cable Assemblies

	Odbie Assemblies
Item #	Description
PBX System	as LLC builds a full line of cable assemblies shown below. We also offer custom cable assemblies
Note: Length	ns of cable can be user specified –nn denotes length
PBX System	ns Cable for Leica Equipment
56020-nn	Leica Optical to Data Controller and Battery pack cable, Lemo 1B-5(M) to DE9(F) and Lemo 0B-5(M)
55690-nn	Leica 530 to Airlink Raven w/power, Lemo 1B-8(M) to DE9(F) with 2 pin Molex
56040-nn	Leica 530 power cable with fuse holder, Lemo 0B-5 (M) to SAE w/Fuse Holder
56210-nn	Leica 530 power cable, 2 pin SAE to Fastons, 8 inches. (goes with 56040-nn)
56400-nn	Leica 530 Rover to Teledesign TS4000 (watertight case) cable with internal power, Lemo 1B-8 (M) to
	Lemo 2B-19 (M), GPS powers radio
56410-nn	Leica 530 Base to Teledesign TS4000 (watertight case) cable with power and fuse holder. Lemo 1B-8
	(M) to Lemo 2B-19 (M) w/ 2 pin SAE and Fuse Holder
56420-nn	Leica 530 to Terminal cable, Lemo 1B-5(M) to Lemo 1B-5(M)
57560-nn	Leica 530 to PC cable, Lemo 1B-5(M) to DE9(F)
58120-nn	Leica data extension cable, Lemo 0B-5(M) to Lemo 0B-5(F)
58160-nn	Leica 530 to Teledesign TS4000 (standard case) Cable, Lemo 1B-8(M) to DE9(M)
58490-nn	Leica 1200 to Terminal Cable, Lemo 1B-8(M) to Lemo 1B-8(M)
PBX System	ns Cable for PacCrest Equipment
54190-nn	PacCrest RFM96W/PDL Rover to Trimble 4000 (port 2) cable with internal power, Lemo 1B-7(M) to
	Lemo 0B-5(M), Trimble powers radio.
54420-nn	PacCrest RFM96W to Antenna cable, N type (M) to BNC (M) on RG58 cable.
54730-nn	PacCrest 35W/PDL Base w/power to PC cable, Lemo 1B-5(M) with 2 pin SAE to DE9(F)
55060-nn	PacCrest 35W/PDL Base frequency change cable w/ power, Lemo 1B-5(M) w/SAE to DE9 (F),
55170-nn	PacCrest 35W/PDL Base to Trimble 4000 (port 2) cable w/ power, Lemo 1B-7(M) to
	Lemo 1B-5(M) with 2 pin SAE.
55700-nn	PacCrest RFM96W to Battery cable, 2 pin SAE with Fuse Holder to Lugs.
58480-nn	PacCrest RFM96W/PDL Rover to Trimble 4700/4800/5700 Base Cable , Lemo 0B-7(M) to
	Lemo 0B-5(M) with 2 pin SAE.
57940-nn	PacCrest 35W/PDL Base w/power to Sokkia Radian cable, Lemo 1K-10(M) to
	Lemo 1B-5(M) with 2 pin SAE.
55850-nn	PacCrest RFM96S to Lugs power cable , Molex 2 connector (M) to 1/2 inch lugs w/Fuse Holder.
-	ns Cable for Sokkia Equipment
58280-nn	Sokkia to TSC-1 Cable, Hirose 6(M) to Lemo 0B-7(M).
55940-nn	Sokkia to PC download cable, Hirose 6 (M) to DE9 (F).
	ns Cable for Teledesign radios
54530-nn	Trimble 4700/4800/5700 to Teledesign TS4000 (standard case) w / PWR cable, Lemo 0B-7(M) to
F4060 nn	DE9(M) w/ open ends for power
54960-nn 55630-nn	Teledesign TS4000 (standard case) RF Adapter cable, BNC(M) to TNC(F)
55630-1111	Trimble 4700/4800/5700 R/A to Teledesign TS4000 (watertight case) Rover cable w/ power, Lemo
FF640 pp	0B-7(M) R/A to Lemo 2B-19 (M) with 2 pin SAE.
55640-nn	Trimble 4700/4800/5700 R/A to Teledesign TS4000 (watertight case) Base cable w/ power, Lemo
56290 22	0B-7(M) R/A to Lemo 2B-19 (M) with 2 pin SAE. Tolodosign TS4000 (standard case) to antonna cable. RNC(M) to N(M) on RG58 cable.
56280-nn 56370-nn	Teledesign TS4000 (standard case) to antenna cable, BNC(M) to N(M) on RG58 cable
	Teledesign TS4000 (watertight case) to antenna cable, TNC(M) to TNC(M) on RG58 cable
56490-nn	Teledesign TS4000 (watertight case) power cable w/ fuse holder , 2 pin SAE to 1/2 inch lugs w/ Fuse Holder
	1 05C 1 1010C1

Why do we fuse both the +ve and -ve leads on most radio power cables? If you reverse the wiring on your GPS receiver to a car battery the negative terminal on the data cable to your radio is now live at 12v. If the radio is wired correctly you'll short the 12v through the negative connected radio data plug and start making smoke! Our dual fuses help to make sure you're covered!!



Cable Assemblies

Item #	Description Description
	Cable for Teledesign radios continued
56800-nn	Teledesign TS4000 (watertight case) w/power to PC programming cable, Lemo 2B-19 (M) to DE9 (F) with 2 pin SAE.
58170-nn	Trimble 4700/4800/5700 Base R/A to Teledesign TS4000 (watertight case) cable, Lemo 0B-7(M) R/A to Lemo 2B-19(M) with 2 pin SAE.
58320-nn	Trimble 4700/4800/5700 Rover to Teledesign TS4000 (watertight case) cable, Lemo 0B-7(M) to
TOOOCOACII	Lemo 2B-19(M).
TS0360AGU	Teledesign TS4000 (watertight case) to PC Programming cable, Lemo 2B-19(M) to DE9(M) w/SAE for power.
57280-nn	2 pin SAE to Cigarette Adapter Power cable.
57440-nn	2 pin SAE to Alligator Clips Power Cable with Fuse Holder.
	Cables for Topcon Equipment
55050-nn 57780-nn	Topcon to PC download cable, ODU-7 (M) to DE9 (F).
57760-1111	Topcon Legacy to PacCrest 35W/PDL Base cable w/ power , Fischer 7(M) to Lemo 1B-5 (M) with 2 pin SAE.
57790-nn	Topcon Legacy to PacCrest RFM96W/PDL Rover cable w/ power, Fischer 7(M) to
	Lemo 0B-5 (M) with 2 pin SAE
	Cables for Trimble Equipment
A00386	Trimble 4000 (port2) to PacCrest RFM96W cable w/ internal power, Lemo 1B-7(M) to Lemo 0B-5(M)
	Trimble powers radio. For rover/ receive only.
ACFRS-90	Trimble 4700 Right Angle to Single Camcorder battery power cable, Lemo 0B-7(M) R/A to single 'P' clip.
55750-nn	Trimble 4000 (port 1) to 1/2" Lugs power cable, Lemo 1B-5 (M) to 1/2" Lugs
57650-nn	Trimble 4000 (port 1) to Alligator Clips power cable w/ fuse holder, Lemo 1B-5 (M) to Alligator Clips w/ Fuse Holder.
56250-nn	Trimble 4000 (port 1) to Dual Camcorder batteries cable, Lemo 1B-5 (M) to dual 'P' clips.
56190-nn	Trimble 4000 (port 1) to Quad Camcorder batteries cable, Lemo 1B-5 (M) to quad 'P' clips.
56320-nn	Trimble 4000 (port 1) to Faston Battery Lugs power cable w/ fuse holder, Lemo 1B-5 (M) to Faston
	Battery Lugs w/Fuse Holder.
56200-nn	Trimble 4000 (port 1) to Fastons Battery Lugs power cable w/ dual fuse holders , Lemo 1B-5 (M) to
50010 pp	1/2 inch lugs with both leads fused.
59010-nn 56390-nn	Trimble 4000 (port 1) to PC cable, Lemo 1B-5(M) to DE9(F) Trimble 4000 (port 1) to Trimmark IIe cable, Lemo 1B-5 (M) to Lemo 0B-7 (M).
58020-nn	Trimble 4000 (port 1) to Trimmark he cable, Lemo 1B-5 (M) to Lemo 0B-7 (M).
59020-nn	Trimble 4000 (port 2) to PC cable, Lemo 1B-7(M) to DE9(F)
55740-nn	Trimble 4000 (port 2) to Teledesign TSI9600 data cable, Lemo 1B-7(M) to DE9(M),
57990-nn	Trimble 4000 (port 2) to Trimmark II cable, Lemo 1B-7(M) to Lemo 0B-5(M).
57980-nn	Trimble 4000 (port 2) to Trimmark III cable, Lemo 1B-7(M) to Lemo 0B-7(M).
55000-nn	Trimble 4000 (port 2) to TSC-1 controller cable, Lemo 1B-7(M) to Lemo 0B-7(M).
57910-nn	Trimble 4000(port 2) to PacCrest 35W old style cable w/power, Lemo 1B-7(M) to Lemo 0B-5(M) and
	Lemo 0B-2(M) with 2 pin SAE.
57880-nn	Trimble 4000(port 2) to TDC-1 cable, Lemo 1B-7(M) to Hirose 12(M).
14553-nn	Trimble 4000/4400/4700 to L1/L2 antenna cable, Lemo coax (M) to N(M).
14553-01	Trimble 4000/4400/4700 to RA L1/L2 antenna cable, Lemo coax (M) to N(M) R/A.
57730-nn	Trimble 4000/4400/4700/4800 GPS Antenna Adapter cable for L1/L2 antennas, Lemo RF Coax (M) to N (F).
54370-nn	Trimble 4000/4400/4700/4800 GPS Receiver to L1/L2 Antenna cable , Lemo RF Coax (M) to N(M)



Cable Assemblies

A A SC SC SC	Cable Assemblies
Item #	Description
PBX Systems (Cable for Trimble Equipment continued
57530-nn	Trimble 4000/4400/4700/4800 GPS Receiver to Zepher antenna cable, Lemo RF Coax(M) to
	TNC (M) on RG58 cable.
57430-nn	Trimble 4000/4400/4700/4800 to Zepher antenna R/A cable, Lemo RF Coax (M) to TNC (M) R/A
	on RG58 cable.
54520-nn	Trimble 4000/4700 Antenna to N adapter cable, Lemo RF Coax (M) to N(F) on RG58 cable.
55280-nn	Trimble 4700/4800/5700 R/A to single Camcorder battery cable, Lemo 0B-7(M) R/A to single 'P'
7 / 1	clip.
58130-nn	Trimble 4000/4700 to L1/L2 R/A antenna cable, Lemo RF Coax(M) to N(M) RA.
33928-02	Trimble 4700/4800/5700 to dual Camcorder batteries cable, Lemo 0B-7(M) to two 'P'clips.
A00925	Trimble 4700/4800/5700 to PacCrest RFM96W cable w/ internal power, Lemo 0B-7(M) to Lemo
	0B-5(M) Trimble powers radio. For rover/ receive only.
35594-nn	Trimble 4700/4800/5700 GPS Receiver extension cable, Lemo 0B-7(M) to Lemo 0B-7(F).
55241-nn	Trimble 4700/4800/5700 or TSC-1 controller w/ power to PC cable, Lemo 0B-7(M) with 2 pin
	SAE to DE9(F).
32960-nn	Trimble 4700/4800/5700 or TSC-1 to PC download cable, Lemo 0B-7(M) to DE9(F).
54180-nn	Trimble 4700/4800/5700 R/A to TSC-1 controller cable, Lemo 0B-7(M) R/A to Lemo 0B-7(M).
58340-nn	Trimble 4700/4800/5700 to Alligator Clips cable w/fuse holder , Lemo 0B-7(M) to Alligator Clips
	with inline fuse holder.
57590-nn	Trimble 4700/4800/5700 to Cigarette Adapter power cable, Lemo 0B-7 (M) to Cigarette Adapter.
55270-nn	Trimble 4700/4800/5700 to Faston Lugs power cable w/ fuse holder , Lemo 0B-7 (M) to Faston
	Battery Lugs w/ in line Fuse Holder.
57580-nn	Trimble 4700/4800/5700 to old style PacCrest 35W, Lemo 0B-7(M) to Lemo 0B-5(M), Lemo 0B-
	2(M), and 2 pin SAE connector,
54580-nn	Trimble 4700/4800/5700 to Open Ended power cable, Lemo 0B-7 (M) to open ends
57770-nn	Trimble 4700/4800/5700 to PacCrest 35W/PDL Base cable w/ power, Lemo 0B-7 (M) to Lemo
	1B-5 (M) and 2 pin SAE,.
55560-nn	Trimble 4700/4800/5700 to PacCrest RFM96W/ PDL rover cable w/ internal power for rover
	backpack, Lemo 0B-7(M) to Lemo 0B-5(M) Trimble powers radio.
54430-nn	Trimble 4700/4800/5700 to PacCrest RFM96W/PDL cable, Lemo 0B-7(M) to Lemo 0B-5(M)
54360-nn	Trimble 4700/4800/5700 to single Camcorder battery cable, Lemo 0B-7(M) to single 'P' clip.
55140-nn	Trimble 4700/4800/5700 to Teledesign TS4000 cable, Lemo 0B-7 (M) to DE9(M)
53560-nn	Trimble 4700/4800/5700 to Trimmark II radio cable, Lemo 0B-7 (M) to Lemo 1B-5 (M), .
53570-nn	Trimble 4700/4800/5700 to TSC-1 controller cable, Lemo 0B-7(M) to Lemo 0B-7(M).
54660-nn	Trimble 4700/4800/5700 to Zepher antenna cable, TNC(M) to TNC(M) R/A on RG58 cable.
57710-nn	Trimble 5700 GPS antenna to Lemo RF Female Coax adapter cable, TNC (M) to Lemo RF Coax
	(F).
55930-nn	Trimble 5700 to L1/L2 antenna cable, TNC (M) to N (M) on RG58 cable.
57270-nn	Trimble 5700 to Zepher antenna cable, TNC (M) to TNC (M) on LMR400 cable.
57020-nn	Trimble 5700 to Zepher antenna cable, TNC (M) to TNC (M) on RG58 cable.
32959-nn	Trimble TSC-1 to Trimble OSM data transfer cable, Lemo 0B-7(M) to Lemo 1B-5(F).
54790-nn	Trimble TSC-1 to Trimble OSM II data transfer cable, Lemo 0B-7(M) to Lemo 1B-5(F).
	able for Trimmark Equipment
58960-nn	Trimmark II to Battery Cable, Fischer 2(M) to Terminal Rings with Fuse Holder

Antenna Cable

Item #	Description
PBX Syster	ns Antenna Cable
56360-10	N(M) to N(M) on RG58 cable.
56380-nn	TNC(M) to N(M) on RG58 cable.
56460-nn	N(M) to N(M) on LMR400 cable.
58330-10	N(M) to N(F) on RG58 cable.
55890-nn	N(M) to N(M) Right Angle on RG58 cable.
59800-nn	SMA(M) Reverse Polarity to N type Female on LMR240 cable.
55760-nn	TNC (M) to TNC (F) on RG58 cable

Bulk Coax Cable

	To 2 200 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Item #	Description
LMR-400 Cable	LMR-400 low loss coax cable, 3/8", braided, 500 ft roll.
LMR-400-DB	LMR-400 low loss coax cable, 3/8", Foam Polyethylene, Braided, Direct Burial, 500 ft roll.
LMR-400-UF	LMR-400 low loss coax cable, 3/8", Foam Polyethylene, Braided, UltraFlex, 500 ft roll.
LMR-240	LMR-240 low loss coax cable, 1/4 inch, Foam, Polyethylene, Braided, 500 foot roll.
LMR-600	LMR-600 low loss coax cable, 1/2 inch, braided, 500 foot roll.
LMR-600-DB	LMR-600 low loss coax cable, 1/2 inch, Foam Polyethylene, Braided, 500 foot roll.
LMR-900-DB	LMR-900 low loss coax cable, 500 foot roll, 5/8 inch, braided.
BEL-8240	RG-58/U, Polyethylene, 51.5 Ohm, braided coaxial cable.
BEL-9311	RG-58A/U, 1/5 inch, Foam Polyethylene, braided coaxial cable.
RG-142	RG-142, 1/5 inch braided coaxial cable. 500 foot roll
RG-213	RG-213, .375 inch braided coaxial cable. 500 foot roll
RG-214	RG-214, .425 inch braided coaxial cable. 500 foot roll





RF Connectors

Item #	Description		
LMR240			
RFT-1201-1X		TNC(M) Clamp Connector.	
TMC-EZ-240-1	NMH-D	N(M) Crimp Connector.	
TMC-EZ-240-S	SM	SMA(M) Crimp Connector.	
TMC-EZ-240-	TM-RP	TNC(M) Reverse Polarity Crimp Connecte	or.
TMC-TC-240-I	ВМС	BNC (M) Clamp Connector.	
TMC-TC-240-I	MUHF	Mini-UHF (M) Clamp Connector.	
TMC-TC-240-I	NMC	N type (M) Clamp connector.	
LMR400			
RFU-507-1		UHF(F) Clamp Connector.	
RFU-507-S1		UHF(M) Clamp Connector.	
RP-1216-1		TNC(F) Reverse Polarity Crimp Connector	or.
TMC-EZ-400-1	NF	N(F) Crimp Connector.	
TMC-EZ-400-1	HMM	N(M) Crimp Connector.	
TMC-EZ-400-1	NMK	N(M) Crimp Connector.	
TMC-EZ-400-	ГМ	TNC(M), Crimp Connector.	
TMC-EZ-400-U	JM	UHF(M) Crimp Connector.	
TMC-TC-400-I	ВМ	BNC (M) Clamp connector.	
TMC-TC-400-I	MUHF	Mini-UHF (M) Crimp connector.	
TMC-TC-400-I	NFC	N type (F) Clamp Connector.	
TMC-TC-400-I	NMC	N type (M) Clamp connector.	
TMC-TC-400-I	NMC-RA	N type (M) R/A clamp connector.	
TMC-TC-400-I	NMH-D	N type (M) Crimp Connector.	
TMC-TC-400-	TF-RP	TNC(F) Reverse Polarity Connector.	
TMC-TC-400-	ΤМ	TNC(M) Crimp connector.	
TMC-TC-400-	TM-RA	TNC(M) R/A Crimp connector.	
TMC-TC-400-	TM-RP	TNC(M) Reverse Polarity Crimp Connected	or.
LMR600			
TMC-EZ-600-1	NF	N(F), Crimp Connector.	
TMC-EZ-600-1	NMH-D	N(M), Crimp Connector	
TMC-EZ-600-	ГМ	TNC(M),Crimp Connector	
TMC-EZ-600-	ΓM-RP	TNC(M) Reverse Polarity, Crimp Connect	or.
TMC-EZ-600-U	JM	UHF(M) Crimp Connector.	
TMC-TC-600-7	716MC	7/16 DIN(M) Clamp Connector.	
TMC-TC-600-I	VMH-D	N(M) Crimp Connector.	
LMR900			
TMC-EZ-900-1	NMC-2	N(M), Crimp Connector.	
RG8			
TMC-SC-400-	NM	N(M) Crimp Connector.	

We stand behind our products

RF Connectors

Item #	Description
RG58	1,510,1101
RFU-600-6	miniUHF(M) Crimp Connector.
RP-1212-C	TNC(F) Reverse Polarity Crimp Connector.
RP-3000-C	SMA(M) Reverse Polarity Crimp Connector.
RSA-3100-C	SMA(M) Clamp Connector.
RFB-1100-2	BNC(M) Clamp Connector.
RFB-1100-2ST	BNC(M) Clamp Connector.
RFB-1123-1	BNC(F) Clamp Connector.
RFN-1000-N	N(M) Clamp Connector.
RFN-1005-3C	N(M) Crimp Connector.
RFN-1005-3C1	N(M) Crimp Connector.
RFN-1009-C	N(M) Right Angle Crimp Connector.
RFN-1025-1	N(F) Clamp Connector.
RFN-1027	N(F) Crimp Connector.
RFT-1200	TNC (M) Clamp Connector.
RFT-1202-2	TNC(M) Crimp Connector.
RFT-1216-1	TNC(F) Reverse Polarity Crimp Connector.
RFT-1218	TNC(M) Right Angle Crimp Connector.
RFU-500	UHF(M) Clamp Connector.
RG213	
RFN-1006-3E	N(M) Crimp Connector.
RG214	
RFN-1006-3F	N(M) Crimp Connector.
	TIATUITA A

Tools for Connectors

Item #	Description
TMC-TK-400-EZ	Tool Kit for applying Crimp Connectors to LMR-400 cable
TMC-TK-600-EZ	Tool Kit for applying Crimp Connectors to LMR-600 cable
RFA-4005	Crimp Tool for RG-214 cable.
CCT-01	Tool for cutting all sizes of LMR cable.
CT-240	Crimp Tool for LMR-240 cable.
CT-400/300	Crimp Tool for LMR-300 and LMR-400 cable.
DBT-01	Tool for deburring LMR-400 or LMR-600
DBT-02	Tool for deburring LMR-240 cable.
DBT-U	Tool for deburring LMR-195 to LMR-600 cable.
HX-4	Tool for Crimping LMR cable, Handle only.
Y1719	Die Set for Crimp connectors using LMR-400, handle sold seperately.
Y1720	Die Set for Crimp connectors using LMR-600, handle sold seperately.
ST600-EZ	Cable Preparation Tool for Crimp connector, LMR-600
ST900/1200 EZ	Cable Preparation Tool for Crimp connector, LMR-900 and LMR-1200
ST-240-EZ	Cable Preparation Tool for Crimp connector, LMR-240
TMC-RB-456	Replacement Blades for ST600-EZ.

Lightning Protectors

Item #	Description
17-502	Gas Discharge Lightning Arrestor.
DSXL	Polyphaser, 800-2200MHz, DC Blocked, N type Female Connectors.
PSXL	Polyphaser, 1200-2800MHz, DC Blocked, N type Female Connectors.
DGXZ+15NFNF-A	Polyphaser, 800-2500 MHz, DC Pass, N type Female Connector.

Help protect your permanent GPS installation! Use a surge protector on the power plugs and install one of our lightning protectors in the GPS antenna feed. Call us for recommendations!

Antennas

	Attromited
Item #	Description
Maxrad	
Note: Maxrad ar	ntennas require MMK3 mounts
MFB1560	VHF unity gain whip antenna 156-162 Mhz, N type female connector, omni-directional, 0dBd gain,
	71" long .
MFB1563	VHF 3dB gain whip antenna 156-162 Mhz, N type female connector, omni-directional, 3dBd gain,
	129" long,
MFB4500	UHF unity gain whip antenna 450-470 Mhz, N type female connector, omni-directional, 0dBd gain,
	30" long .
MFB4503	UHF 3dB gain whip antenna 450-460 Mhz, N type female connector, omni-directional, 3dBd gain,
	71" long .
MFB4505	UHF 5dB gain whip antenna 450-460 Mhz, N type female connector, omni-directional, 5dBd gain,
	77" long .
MFB9153	902-928 MHz, 3 dBd gain, Omni-directional, N(F) Connector.
MMK3	Antenna Mounting bracket for fibreglass whip antennas. Contains full kit for pipe-mounting one
	antenna.
PBX450	Colinear Antenna, 450-470 MHz, 5dB, field tunable (mounts on PBX340 range pole mount)
RFI Industries	
HD70	Mopole Ground Independent Antenna, 70-85 MHz, unity gain, heavy duty, UHF (F) connector.
CD17-26-73	Mopole Ground Independent Antenna, 70-77 MHz, unity gain, stainless steel.
CD18-26-73	Mopole Ground Independent Antenna, 70-77 MHz, unity gain, Fiberglass.
CD28-37-70	Mopole Ground Independent Antenna, 133-163 MHz, unity gain, stainless steel.
CISCO	
15-521	5.8 GHz, 12 dBi gain, Omni-Directional Antenna
Teletronics	
AIR-ANT2506	2.4Ghz, WiFi Whip Antenna
Pacific Wireless	
ODH24-13	13 dBi gain, Omni-Directional Antenna

Antennas

Item #	Description
Antennex	
Note: Antennex an	tennas require an FM-2 mount
FG1560	VHF unity gain whip antenna 156-162 Mhz, omni-directional 0dBd gain, 68" long, N (F) connector.
FG1563	VHF 3dB gain whip antenna 156-162 Mhz, omni-directional 3dBd gain, 107" long, N (F) connector.
FG4500	UHF unity gain whip antenna 450-470 Mhz, omni-directional 0dBd gain, 26" long, N (F) connector.
FG4503	UHF 3dB gain whip antenna 450-460 Mhz, omni-directional 0dBd gain, 26" long, N (F) connector.
FG4505	UHF 5dB gain whip antenna 450-460 Mhz, omni-directional 5dBd gain, 76" long, N (F) connector.
FG4505W	UHF 5dB gain whip antenna 450-470 Mhz,omni-directional 5dBd gain, 76" long, N (F) connector.
FM-2	Mounting bracket for fibreglass whip antennas, Contains full kit for pipe-mounting one antenna
Astron	
V9180	900 MHz, unity gian, Omni-directional, N (F) connector on one foot pigtail.
V9180FXNF	900 MHz, unity gian, Omni-directional, waterproof, N (F) connector.
VG2400	2.4GHz, unity gain, Omni <mark>-directional, N (F) connector on one</mark> foot pigtail.
VG2400IOFXNF	2.4GHz, unity gain, Omni-directional,waterproof, N (F) connector.
Cushcraft	
CSS-S2403BP12N	NF 2.4 to 2.5 GHz, 3 dbi gain, Omnidirectional with N type Female Connector.
Celwave	
BA-1012-1	144-162 MHz, Unity gain, Omnidirectional with N(F) connector. Includes mounting hardware.
BA-6312-0	406-512 Mhz, 3 dBd gain, Omnidirectional, N(F) Connector w/Mounting Kit.
PD201-7	450-470 MHz, 5 dBd gain, Omnidirectional, N(F) connector. Includes mounting hardware.
BA-1012-2	RFS Antenna, 154-174 Mhz, Unity Gain, Omnidirectional, N(F) connector. Includes Mounting Kit.
Decibel	
DB586Y	890 to 960 Mhz, 6 dBd gain, Omni-directional, N(F) connector.
DB906SN-T	2.4 Ghz, 6 db gain,Omni-directional, fiberglass, N(F) connector.
ASPA320	Andrews Decibel Antenna mounting clamp used with pole, mast, or tower leg, 1 to 2.75 inches,
	brackets & clamps.
Kathrein/Scala	
733-736	Antenna Mounting Kit for 2" to 4.9" mast.
800-10253	Directional Panel Antenna, 380-500 MHz, 12.5 dBd gain, DIN 7/16 connector.
	Needs 733-736 Mounting Kit.
K7516221	420-449 MHz, 7 dbi gain, Omni-directional, fiberglass, N(F) connector.
K5126411	68-78 MHz, 0 db gain, Omni-directional, fiberglass, N(F) connector.
OGB9-915-N	870-960 MHz. 9 dBd gain

For permanent installations of more than 150ft we recommend a lower loss coax from Times Microwave or Andrew. When connecting your GPS or radio equipment, consider using a short flexible pigtail into the equipment. This will ensure the stiff coax doesn't strain, and possibly break the equipment housing. Also make sure you install a "drip loop" to stop water running down the coax or into the connectors.





Fiber Cable

Item # Description

We have a complete line of Fiber Patch Cable

Specify:

Length: 1m, 2m, 3m, 5m, 10m Single Mode or Multimode Simplex or Duplex 9/125, 50/125, 62.5/125

Network Cables

Item # Description

CAT5E Cable

Unshielded Twisted Pair (UTP)

24 AWG stranded cable

Molded with or without Boot

Designate Patch or Cross Over Patch (add a P or C after the part number)

Non-standard sizes and colors available

Part No.	Length	Color
P10X6-310G103	3 ft.	Gray
P10X6-310G107	7 ft.	Gray
P10X6-310G114	14 ft.	Gray
P10X6-310G125	25 ft.	Gray
P10X6-310R103	3 ft.	Red
P10X6-310R107	7 ft.	Red
P10X6-310R114	14 ft.	Red
P10X6-310R125	25 ft.	Red
P10X6-310K103	3 ft.	Black
P10X6-310K107	7 ft.	Black
P10X6-310K114	14 ft.	Black
P10X6-310K125	25 ft.	Black
P10X6-310B103	3 ft.	Blue
P10X6-310B105	5 ft.	Blue
P10X6-310B107	7 ft.	Blue
P10X6-310B110	10 ft.	Blue
P10X6-310B114	14 ft.	Blue
P10X6-310B125	25 ft.	Blue
P10X6-310Y103	3 ft.	Yellow
P10X6-310Y105	5 ft.	Yellow
P10X6-310Y107	7 ft.	Yellow
P10X6-310Y110	10 ft.	Yellow
P10X6-310Y114	14 ft.	Yellow
P10X6-310Y125	25 ft.	Yellow



Don't take chances... We'll check your cables for free!



Network Cables

Item #	D	escription		
CAT6 Cable				
Unshielded Twiste	Unshielded Twisted Pair (UTP)			
24 AWG stranded	24 AWG stranded cable			
Molded with or without Boot				
Designate Patch or Cross Over Patch (add a P or C after the part number)				
Non-standard sizes and colors available				
Part No.	Length	Color		
P10X8-310G103	3 ft.	Gray		
P10X8-310G107	7 ft.	Grav		

14011-Staridard Sizes	s and colors available	
Part No.	Length	Color
P10X8-310G103	3 ft.	Gray
P10X8-310G107	7 ft.	Gray
P10X8-310G114	14 ft.	Gray
P10X8-310G125	25 ft.	Gray
P10X8-310G150	50 ft.	Gray
P10X8-310B103	3 ft.	Blue
P10X8-310B107	7 ft.	Blue
P10X8-310B114	14 ft.	Blue
P10X8-310B125	25 ft.	Blue
P10X8-310B150	50 ft.	Blue
P10X8-310W103	3 ft.	White
P10X8-310W107	7 ft.	White
P10X8-310R103	3 ft.	Red
P10X8-310R107	7 ft.	Red
P10X8-310R125	25 ft.	Red
P10X8-310R150	50 ft.	Red
P10X8-310N103	3 ft.	Green
P10X8-310N107	7 ft.	Green
P10X8-310N114	14 ft.	Green
P10X8-310K107	7 ft.	Black
P10X8-310K114	14 ft.	Black
P10X8-310K125	25 ft.	Black
P10X8-310Y103	3 ft.	Yellow
P10X8-310Y107	7 ft.	Yellow



We'll check your cables for free!

Optical DVI extenders up to 100m

- Digital display systems interconnection for medical, military, aero, factory, and traffic control
- Digital FPDs, PDPs and projectors in conference room and auditorium
- Kiosk with digital FPDs
- Color LED signboards, FPDs and PDPs for information display and stadiums

Optical Cables

	tical Cabics
Item #	Description
Optical DVI extenders	
PBX1-1P0	Point to point Hybrid Cable
PBX1-1000	Express All-Fiber DVI Cable
PBX1-100A	Virtual EDID All-fiber DVI Cable
PBX1-201SA-TR	Fiber only Detachable Module
PBX1-201DA-TR	Two Fiber Detachable Module
PBX1-201CA-TR	One Fiber Detachable Module
PBX1-2R2-TR	Fiber/copper Detachable Module
PBX1-2R2VI-DU	Dual Link Detachable Module
PBX1-3R2VI-DU	Universal Dual-link Detachable Module
PBX5-2000/2001	Optical DVI Daisy-Chain
Optical HDMI Extender	
PBX1-2R2H-TR	Fiber/Copper Detachable Module
PBX1-2000	Point to Point HDMI Cable

Optical Cables

Item # Description

Optical USB Extender

PBX2-1xx Pure Fiber-Optic USB Cable PBX2-2xx Hybrid Fiber USB Cable

Optical firewire Repeater

PBX4-200 Pair of two repeaters, one-optical and two-electrical ports

PBX4-201 Pair of two repeaters, two-optical and one-electrical ports; provides a long fiber-

optic extension of additional 1394 devices. capable of two-way fiber connection in forward and backward directions, which eventually makes a daisy chain with

each repeater of M4-200 at both ends

Optical multi-interface Extender

PBX5-1001 SM-Duplex Detachable Module
PBX5-1002 Optical DVI,Audio Extension Module

PBX5-2A2-TR Digital Video/Audio, RS232 Optical Extension Module
PBX5-2C2-TR Digital Video/Audio, RS232 CAT5e Extension Module

PBX5-1003 Optical KVM Extension Module

SPIDER Pro AV network

HDMI Selector
DVI Distributor
HDMI Distributor
HDMI Matrix Router
DVI Matrix Router
ODPBX44/66/88

Adapters

Item #	Description
Adapters	
P31D1-3117200	DB9 Male to RJ45 Female, specify color: gray or black.
P31D1-3117400	DB9 Female to RJ45 Female, specify color: gray, black, blue, red or yellow.
P31D3-3137200	DB25 Male to RJ45 Female, specify color: gray, black or blue
P31D3-3137400	DB25 Female to RJ45 Female, specify color: gray, black or blue.
Null Modem Adapters	
P30D1-3118100	DB9 Male to DB9 Male.
P30D1-3118200	DB9 Male to DB9 Female.
P30D1-3118400	DB9 Female to DB9 Female.
P30D3-3138100	DB25 Male to DB25 Male.
P30D3-3138200	DB25 Male to DB25 Female.
P30D3-3138400	DB25 Female to DB25 Female.
VGA Adapters	
P30D1-3119300	DB9 Female to HD15 Male.
P30H1-3106400	HD15 Female to HD15 Female.
RS232 Adapters	
P30D3-3121100	DB25 Male to DB25 Male.
P30D3-3121400	DB25 Female to DB25 Female.
CAT5E Adapters	
P30X6-3102400	CAT5E (RJ45), Female to Female, specify color: black or white.
P30X6-3133400	CAT5E (RJ45) Crossover, Female to Female.
Null Modem Adapter Kit	s:
P30D1-3118000-KIT	3 ea DB9(F) to DB9(F),.3 ea DB9(M) to DB9(M),3 ea DB9(M) to DB9(F)
P30D3-3138000-KIT	3 ea DB25(F) to DB25(F),.3 ea DB25(M) to DB25M),3 ea DB25(M) to DB25(F)

Gender Changers

Item #	Description
Serial	
P31D1-3107100	DB9 Male to DB9 Male
P31D1-3107400	DB9 Female to DB9 Female
P31D3-3122100	DB25 Male to DB25 Male
P31D3-3122400	DB25 Female to DB25 Female
P31D4-3103400	DB37 Female to DB37 Female
P31H1-3105100	HD15 Male to HD15 Male
P31H1-3105400	HD15 Female to HD15 Female
Serial Null Mode	m
P31D1-3128100	DB9 Male to DB9 Male
P31D1-3128400	DB9 Female to DB9 Female
P31D1-3128200	DB9 Male to DB9 Female
P31D3-3128200	DB25 Male to DB25 Female
P31D3-3128400	DB25 Female to DB25 Female
P31D4-3103100	DB37 Male to DB37 Male
Mac/Joystick	
P31D2-3102100	DB15 Male to DB15 Male
P31D2-3102400	DB15 Female to DB15 Female
SCSI	
P31C2-3108100	CN50 Male to CN50 Male
P31C2-3108400	CN50 Female to CN50 Female

Lemo Connectors

Item # Description	n
70243-00	0B-7 male straight to repair TSC-1 data cables.
70243-01	0B-7 male right angle to repair TSC-1 data cables.
FFA-1E	Coax RF(M) to repair Trimble 4000/4700/4800 GPS Antenna Cables.
HMG.0B.307CLMP	0B-7 female bulkhead mount to repair Trimble TSC-1
PSA-1E	Lemo RF Bulkhead connector for repairing Trimble 4000/4700/4800 GPS receivers.



Splitters

Item #	Description		
ALDCBS1X2	GPS 2 way amplified antenna splitter, 1 output DC blocked, 20 db gain, Weather proof option		
	extra. Hi-Isolation option extra. Specify connectors (BNC, N type, SMA or TNC).		
ALDCBS1X4	GPS 4 way amplified antenna splitter, 3 outputs DC blocked, 17 db gain. Weather proof option		
	extra. Hi-Isolation option extra. Specify connectors (BNC, N type, SMA or TNC).		
ALDCBS1X8	GPS 8 way amplified antenna splitter, 7 outputs DC blocked, 13 db gain. Weather proof option		
	extra. Hi-Isolation option extra. Specify connectors (BNC, N type, SMA or TNC).		
LDCBS1X2	GPS 2 way passive antenna splitter, 1 output DC blocked, weather proof option extra		
LDCBS1X4	GPS 4 way passive antenna splitter, 3 outputs DC blocked, weather proof option extra		
MIL-NLDCBS1X3	GPS passive Military Spec 3 way Splitter.		
NALDCBS1X2	GPS 2 way amplified antenna splitter w/pwr, 1 output DC blocked, 20 db gain. Weather proof opt.		
	extra. Hi-Isolation opt. extra. Specify conns. (BNC, N type, SMA or TNC), antenna voltage (4V to		
NALDCDC1V4	15VDC) and source volt. (9 to 32VDC/110AC/220EuroAC/23		
NALDCBS1X4	GPS 4 way amplified antenna splitter w/pwr, all outputs DC blocked, 17 db gain. Weather proof		
	opt. extra. Hi-Isolation opt. extra. Specify conns. (BNC, N type, SMA or TNC), ant. volt. (4V to 15VDC) & source volt. (9 to 32VDC/110AC/220EuroAC/230UKAC)		
NALDCBS1X8	GPS 8 way amplified antenna splitter w/pwr, all outputs DC blocked, 13 db gain. Weather proof		
NALDOBSTAG	opt. extra. Hi-Isolation opt. extra. Specify conns. (BNC, N type, SMA or TNC), ant. volt. (4V to		
	15VDC) & source volt. (9 to 32VDC/110AC/220EuroAC/230UKA		
NLDCBS1X2	GPS 2 way passive antenna splitter w/pwr, all outputs DC blocked. Weather proof option		
	extra. Specify connectors (BNC, N type, SMA or TNC), antenna voltage (4V to 15VDC)		
	and source voltage (9 to 32VDC/110AC/220EuroAC/230UKAC).		
NLDCBS1X4	GPS 4 way passive antenna splitter w/pwr, all outputs DC blocked. Weather proof option		
	extra. Specify connectors (BNC, N type, SMA or TNC), antenna voltage (4V to 15VDC) and		
	source voltage (9 to 32VDC/110AC/220EuroAC/230UKAC).		
RMALDCBS1X16	GPS Rack Mount 16 way amplified antenna splitter, all outputs DC blocked, Hi-Isolation (40db)		
	between outputs. Specify connectors (N type, SMA or TNC).		
RMALDCBS1X32	GPS Rack Mount 32 way amplified antenna splitter, all outputs DC blocked, Hi-Isolation (40db)		
	between outputs. Specify connectors (N type, SMA or TNC).		
RMALDCBS1X8	GPS Rack Mount 8 way amplified antenna splitter, all outputs DC blocked, Hi-Isolation (40db)		
	between outputs. Specify connectors (N type, SMA or TNC).		
RMHIALDCBS1X1	RMHIALDCBS1X16GPS Rack Mount 16 way amplified antenna splitter, all outputs DC blocked, Hi-Isolation (40db)		
DAMINAL DODG ::::	between outputs. Specify connectors (BNC, N type, SMA or TNC).		
RMHIALDCBS1X3	2GPS Rack Mount 32 way amplified antenna splitter, all outputs DC blocked, Hi-Isolation (40db)		
	between outputs. Specify connectors (BNC, N type, SMA or TNC).		







GPS Antennas and Mounts

Item #	Description
L1/L2GPSA-N	Antenna, GPS L1/L2, 35 db gain, 5VDC on center pin, N type connector
L1/L2RRKPA-S	Antenna, GPS L1/L2, passive, N type connector (for re-rad kit)
L1RRKPA	Antenna, GPS L1 only, passive, SMA connector (for re-rad kit)
L1GPSA-N	Antenna, GPS L1 only, 38 db gain, 5VDC on center pin, N type connector
L1/L2RAMB	Roof Antenna Mount for L1/L2 Active Antenna.
L1RAMB	Roof Antenna Mount for L1 Active Antenna.
FOGPSAL	GPS fiber optic antenna link.
CPDC1X4	GPS combiner allows 4 antennas on 1 receiver. Specify connectors (BNC, N type, SMA or TNC).

GPS Amplifiers

	Description
Amplifiers	
L1LNA	GPS L1 only filtered low noise amplifier, 40 db gain block, 4.6 to 15 VDC on center pin.
	Specify connectors (BNC, N type, SMA or TNC).
LA20FPDC	GPS filtered line amplifier, 20 db gain, passes DC to antenna. Specify connectors
	(BNC, N type, SMA or TNC).
LA20RPDC	GPS line amplifier, 20 db gain, passes DC to antenna. Specify connectors
	(BNC, N type, SMA or TNC).
LA40FPDC	GPS filtered line amplifier, 40 db gain, passes DC to antenna. Specify connectors
	(BNC, N type, SMA or TNC).
NLA20FPDC	GPS filtered line amplifier w/pwr, 20 db gain, passes DC to antenna. Specify connectors
	(BNC, N type, SMA or TNC), antenna voltage (4V to 15VDC) and source voltage (9 to
	32VDC/110AC/220EuroAC/230UKAC).
NLA20RPDC	GPS line amplifier w/pwr, 20 db gain, passes DC to antenna. Specify connectors
	(BNC, N type, SMA or TNC), antenna voltage (4V to 15VDC) and source voltage (9 to
NII 4 405555	32VDC/110AC/220EuroAC/230UKAC).
NLA40FPDC	GPS filtered line amplifier w/pwr, 40 db gain, passes DC to antenna. Specify connectors
	(BNC, N type, SMA or TNC), antenna voltage (4V to 15VDC) and source voltage (9 to
MLA20RPDC	32VDC/110AC/220EuroAC/230UKAC).
MILAZURPDC	GPS line amplifier, 20 db gain, passes DC to antenna, 3/4 x 2 inches. Specify connectors (N type, SMA or TNC).
	(in type, Sinia of Tino).



GPS Miscellaneous

Item #	Description
Filters	
L1/L2FPDC	GPS L1 /L2 band pass filter, reduces noise and interference by 20 db, passes DC to antenna. Specify connectors (N type, SMA or TNC).
L1FPDC	GPS L1 only band pass filter, reduces noise and interference by 20 db, passes DC to antenna. Specify connectors (N type, SMA or TNC).
Miscellaneous	
DCB	DC voltage block, inline. Specify connectors (BNC, N type, SMA or TNC).
SURGEPRO	GPS Surge Protection with N type connectors
VATTENPDC	GPS L1/L2 attenuator, attenuation variable between 1 and 20 db,passes DC to antenna. Specify connectors(N type, SMA or TNC).



Data Logger

Item #

Description

Data Logger

Cost effective solution for storing remote sensor data

Unit utilizes off-the-shelf Compact flash memory cards

Dual Asynchronous RS232 communications ports

Switch closure and remote closure included

9 to 36 Volt DC input, consumes less than 1 Watt

All events and data are internally time tagged relative to each other

Unit housed in a tough aluminum enclosure

Unit can be customized for client needs





Shallow Water RFID System

Description
RFID Antenna RFID Reader

Designed for the demanding environment of OBC/shallow water seismic work, the PBX Systems LLC ruggedized 136Khz RFID reader and antenna is designed for use on any vessel from the smaller cable maintenance skiff to the largest deployment mother ship. The reader operates on 12VDC and interfaces with all TIRIS compatible software. The antenna can be strapped to a railing or mounted into the deck plate of a deployment squirter. Other custom packaging can be supplied.

PBX Systems, LLC 12710 Century Drive Stafford, Texas 77477 Toll Free: 1-866-763-2994 Phone: 281.240.6163

Fax: 281.491.4856

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