

Alster News

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Raytheon - P25Net RX Voting

The Raytheon P25net™ is a fully compliant, IP-based P25 land mobile radio system.

Receiver Voting

The P25net voting solution function operates transparently; it dynamically selects and passes on the "best" P25 audio signal from among multiple voting receivers. This extends a given channel's P25 conventional coverage area over that of a single receiver system. The solution accommodates and compensates for network transport latencies related to the input data from the various voting receiver sites.

The P25net conventional Voting Function requires P25net Channel Controller

cards at the voting receiver sites to condition the data for transport to the server that hosts the Voter Function Software; typically this will be the same server that runs the system's Base Station Controller (BSC) application. However, the Voting Function is a stand-alone application with its own process management and configuration file and is able to operate anywhere in the system's IP network.

Other Equipment

Other components in-



Raytheon P25 Net

cluded in the P25net system include the Base Station Controller (BSC) and P25net's RFSS Network Controller (RNC). The P25net BSC adds P25 intelligence by providing data interfaces to data services, consoles, PSTN Gateways, and Network Management Systems (NMS). The RNC within P25net forms the basis of the ISSI Interface by functioning in conjunction with the BSC to provide network-wide user authentication, user registration, and Console Sub System Interface (CSSI). P25net's RNC and BSC require servers at each site. P25net is an advanced IP radio network providing full P25 capabilities on an IP network platform. Ω

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Times - Bulkhead Flange Mount

The **LP-BFDN-CW** bulkhead-to-flange universal mounting and grounding adaptor bracket is the newest addition to the **Times-Protect™** line of innovative RF lightning and surge protection products. The **LP-BFDN-CW** bulkhead-to-

flange adaptor is made of copper with a white bronze plating and accommodates both N and DIN type protectors. It allows for multiple protector installation and grounding options where bulkhead provisions are not available. It can be

mounted on a flat grounded surface (i.e. trapeze) supporting installation of lightning protectors and provision is also available for two-hole 1" and 5/8" grounding lugs for grounding protectors where a suspended installation is required. Ω



SpaceNet - Satellite Comm Link

Spacenet's VSATs use a unique frequency and time division multiplexing scheme to use bandwidth more efficiently and protect against outages. To maximize return-path bandwidth efficiency, Connexstar VSAT networks feature a patented frequency and time division multiplexing access (FTDMA) scheme that automatically balances inbound traffic across all channels by allowing individual remote sites to transmit

on any channel at any time. The result is superior response time, measurably improved performance, and more efficient use of inbound bandwidth.

Unique FTDMA

The unique FTDMA scheme requires no back-off in time for retransmissions and consistent utilization of the entire bandwidth by all remote sites. The access scheme provides superior network throughput stability and load bal-

ancing.

This unique technology — not available with competing systems — can also lower costs by reducing the amount of bandwidth needed for your network to function efficiently, as well as eliminate the potential for partial network outages that could occur with traditional VSAT networks if a single inbound channel were to go down.

Please call so we can discuss your applications. Ω



SpaceNet Provides Satellite Comms

Avtec - Works With MOTOTRBO

Avtec demonstrated MOTOTRBO IP Site Connect connectivity to their Scout Console System via a wire-line connection at the 2010 IWCE in Las Vegas.

No other console supports the wire-line connection interface method using the IP Site Connect Protocol. Scout provides a seamless migration path from

conventional wideband radio technology to digital narrowband.

MOTOTRBO IP

MOTOTRBO is a digital radio system from Motorola for both Conventional and Trunked applications. MOTOTRBO supports the ETSI Digital Mobile Radio (DMR) standard.

It uses 12.5 KHz TDMA (Time Division Multiple Access) which provides 2 radio channels, for what is known as "6.25kHz equivalency".

Aeroflex Supports

Aeroflex supports and tests MOTOTRBO base stations, mobiles and portables. Ask for info. Ω

Avtec Scout Consoles work with Motorola MOTOTRBO

Larsen's New NMOHFGPS

Larsen's new combo GPS NMOHFGPS series direct mount (34" hole) combines the NMOHF (high frequency) mobile antenna mount with an integrated active GPS antenna in a single compact, rugged package. With a broad operating frequency range of 27 MHz to 6 GHz, this

combination antenna provides GPS coverage together with wireless voice/data coverage in a single package.

The NMOHFGPS series mount is aesthetically appealing with a small footprint and low profile, measuring only 4.5" long by 2" wide and just 0.7" tall. The

integrated NMOHF mount provides superior impedance matching at frequencies above 1 GHz as compared to the industry standard NMO mount. It also comes standard with 17' of RG-58 on the NMO side and RG-174 on the GPS side. Call me for a sample to try out. Ω



Larsen NMOHFGPS Multi-Band Antenna



TXRX 700/800 Ceramic Combiners

Bird Technologies Group introduces the new TX RX Systems **Ceramic Transmitter Combiners**, which combine multiple transmitters onto a single antenna.

With a footprint that's more than 50% smaller than comparably performing 10" cavities, the ceramic combiner optimizes valuable space for your radio equipment. Realizing your escalating lease costs and need for high performing equipment, these ceramic com-

biners become the perfect solution for expansion.

Buildable Design

The modular design allows you to purchase in two-channel increments to suit your current needs and add as your needs change.

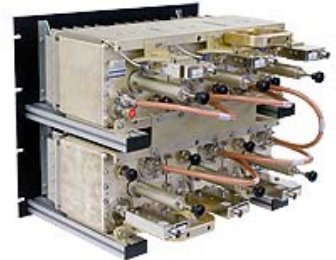
The new product is available in 2, 4, 6 or 8 channel configurations in either 763 - 776 MHz or 851 - 869 MHz frequency bands.

The single junction iso-

lator provides 32 dB TX to TX isolation and 20 dB Antenna to TX isolation.

Insertion loss varies from 2.7 dB for 2 each 500 kHz channels to 3.3 dB for 8 each 500 kHz channels. Power handling is 110 watts, continuous per channel. Input connector is N female and output connector is 7/16 DIN female.

This new product is also competitively priced, so please give us a chance to quote your needs. Ω



**TXRX Systems
Ceramic Combiner**

Daniels/Satellite Interface

Daniels Electronics provides an interface for applications requiring communications between users at a fixed location and radio users in the field where no radio or land line links between the field and fixed location is practical.

This satellite interface creates interconnectivity between either a transport-

able repeater or base station and a satellite telephone system, which allows communications to and from any location in the satellite network.

Full Comms

Radio users in the field access the satellite telephone by a DTMF sequence and then use the satellite

telephone to dial out to any outside line. Other users can access the repeater / base station from anywhere in the world by dialing into the satellite telephone system (a regional telephone number enabled for the satellite telephone).

For more application notes, please check out the Daniels website. Ω

Daniels Electronics provides an interface between repeaters and base stations and satellite phones

Site Pro - Innerduct Tubing/Lugs

Site Pro I, a division of Valmont Structures, has introduced a Corrugated Innerduct Tubing for "chasing" cables and wires at Cell and Mountain Top communications sites.

High Density Poly

The INDCT2-1000 2" product is manufactured

from High Density Polyethylene (HPDE), including factory installed pull tape.

It is UV Resistant, black and meets Clearwire specifications. It provides long term protection of cables and fiber in several applications in and around your site. Sold on compact 1,000' reels.

1 And 2 Hole Lugs

When you are grounding equipment at the site, don't forget that Site Pro I has several varieties of grounding lugs, plates and other accessories. These include the universal lug with a slot/hole. Call me for more information. Ω



Site Pro 1 Lugs



Stark Foundations - Alternative Auger Type No Concrete Foundation

In the past, installations for monopole and tower structures could take up to 4 to 6 weeks and required assistance from subcontractors and their equipment to dig the hole, set the rebar, pour the concrete and suck the water out (if encountered).

Then you would have to wait 21 to 28 days for the concrete to cure before you could come back and erect the structure. Then, once completed, the installation was per-

manent and the foundation could not be moved.

Now those days are over by using Stark's patent-pending installation system, which provides, **SPEED, EFFICIENCY, INNOVATION, SIMPLICITY, STRENGTH, SCALABILITY, ADAPTABILITY, ECO-FRIENDLY AND COST-EFFECTIVE INSTALLATIONS.** Ω



ACES 2010

We will be holding ACES on October 5/6/7, 2010 so mark your calendars for the first full week of October when we will be in:

Boise, ID - Tue 10-5

Helena, MT - Wed 10-6

Spokane, WA - Thru 10-7

We will have technical seminars, new products in the exhibit area, a free lunch and lots of door prizes. So, come to learn and have a chance to win.

You will enjoy yourself at ACES meeting your colleagues and learning something new. Ω



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