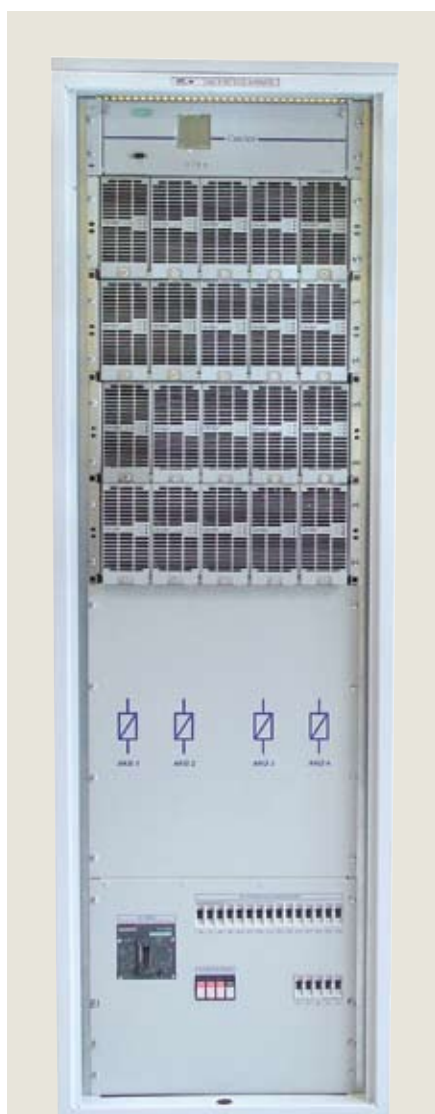


DC Power

for monitored rural exchanges in Turkey



2000A Power System

The rectifiers, controller and shelves complied fully with the technically demanding Turkish specifications, almost from the start of the project, with very little customer specific modification being required.

Maintaining a communications infrastructure in a country covering nearly 800,000 square kilometers is quite a challenge. Rural switching exchanges are located in literally every region of the country.

In 2004, Turk Telekom, the main fixed line provider in Turkey had a requirement for 500 new DC power plants to enlarge its rural network coverage. Argus, a member of The Alpha Group, responded with its leading edge Cordex™ products, successfully overcoming strong local and international competition with the Cordex 48VDC 1kW rectifiers and shelves, CXCR controller with integrated DC powered modem and embedded browser. These Argus components were installed into two unique 19" power system racks, that were designed by Argus then subsequently refined, modified and manufactured in Turkey, by Argus' Turkish partner IPC.

The rectifiers, controller and shelves complied fully with the technically demanding Turkish specifications, almost from the start of the project, with very little customer specific modification being required. Alpha Group resources from Europe, South Africa and Canada were brought together for two weeks of rigorous Prototype and Factory Acceptance Testing that was successfully concluded within just four weeks of signing the sales contract.

Argus won this contract because it could offer the lowest cost of ownership solution, 100% technical compliance, a strong Turkish partnership, and effective 24/7 support.

Turk Telekom was particularly impressed with how quickly Argus translated 1500 lines of parameter labels on the controller's GUI (graphical user interface) into the Turkish language.

In addition to a wide-ranging temperature and humidity variation, the Turkish systems can be subjected to high mains / line distribution losses. This is more than catered for by Cordex' exceptional low line operation. Likewise, high line and mains borne transients are suppressed and/or clamped by special circuit protection devices.

Convection cooling throughout assists in reducing maintenance callouts. Dial-up communication and polling using the CXCR's on-board modem, SNMP protocol and Argus' proprietary MIPS, ensures that the 80 or so of the regional network control centers, have continuous surveillance of all 500 sites to maintain a very resilient network.

These systems are currently powering Alcatel, Ericsson, Siemens and Nortel switches.

When 75% of the contract quantity was installed, Turk Telekom signified their satisfaction with Argus/IPC by awarding a 25% increase in contracted quantities, resulting in 125% of the original contract. This year, an additional 25% was given to IPC.

In 2006, Turkish Telekom issued a new tender for 5000 DC Power Systems for base stations ranging from 7.2kW to 72kW. Argus/IPC was again chosen by Turkish Telekom to provide those systems over the next 3 years.

Being successful in the fixed line communication network positioned Argus/IPC well to accept another challenge in providing solutions for GSM operators like Telsim-Vodafone. Argus has worked successfully with IPC to provide high and low power solutions to Vodafone in Turkey and Northern Cyprus.

An initial contract with Vodafone Turkey was for 100 systems for 2000A based on the Cordex 3.6kW technology. The successful conclusion of the Vodafone Cyprus contract resulted in the award of a contract for 120 systems of 150A based on the Cordex 1.8kW technology.

In addition, Argus and IPC have been successful in penetrating the Utilities Market with the HVDC products, and are working diligently to introduce the FXM family of products into NOKIA Turkey.



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Alpha introduces new battery integration tray



Alpha Technologies, Inc. recently introduced the new Battery Integration Tray, an important step forward in lowering installation and ongoing maintenance costs for outside plant cable power systems.

"Put simply, the Battery Integration Tray reduces installation and maintenance times," said Mike Haass, Broadband Power Product Manager for Alpha, "not only during the initial set-up of a system, but over the system's product lifetime."

Designed to improve power system enclosure wire management and reduce clutter, the Battery Integration Tray comes with pre-wired voltage sense leads for transponder connections, modular 75A Anderson battery connectors and a pre-configured shelf for an AlphaGuard™ charge management system.

"With this tray, the batteries are individually wired and can be installed, removed or replaced easily," said Haass, "avoiding the need for complicated battery cable kits or battery slide trays."

The Battery Integration Tray is available as an option on all new Alpha PWE-3, PWE-6, UPE-3 and UPE-6 Enclosures. Retrofit options for existing Alpha enclosures are also available.



VMX Series

Alpha's next generation CableUPS®



Following the successful development and 2006 launch of the GMX series standby cable broadband power supply, Alpha Technologies has continued the evolution of the line with the introduction of the VMX Series CableUPS®.

Developed to serve developing markets, the GMX was required to accommodate wide voltage input ranges in an economical package. Incorporating Line Interactive Ferro Topology (LIFT), the GMX supports input voltage ranges of +/- 30%.

Developed to serve developing markets, the GMX was required to accommodate wide voltage input ranges in an economical package.

Additionally, one of the variables faced in developing a global CableUPS is the need to mount the power supply in

often-restricted space from system to system and country to country. As a result, the VMX features a dual-mount capability, giving users the option of mounting the unit horizontally on a shelf or vertically in a rack.

Additional features of the VMX include an LCD smart display, terminal block output connections, selectable output taps, external battery temperature probe, built-in chassis handle, replaceable MOV's, interchangeable status monitoring card slot, and a four-output Programmable Interface Module (PIM). To comply with European Union environmental regulation, the VMX is fully RoHS compliant.

Offering rugged sturdiness and adaptable features, the VMX has become the ideal backup power solution for cable operators.



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Alpha Technologies introduces new generator expansion module

Alpha Technologies expanded its PWE line of cable power system enclosures to include the new Generator Expansion Module. Designed to house an AlphaGen™ ACX2000 generator, the Generator Expansion Module allows for advanced planning, or quick response to, extended power outages.

"For extended outages, generators represent a highly cost effective method to increase cable network power supply runtimes," said Mike Haass, Broadband Power Product Manager for Alpha, "and Alpha's



PWE-3 with Generator Expansion Module

Generator Expansion Module eliminates many of the headaches associated with temporarily deploying and safeguarding expensive generators."

Because the Generator Expansion Module is built to the same exacting specifications Alpha is famous for, the generator is protected from weather, as well as theft. Since the generators are safe, mounted to the permanent power system enclosure, maintenance crews can retrieve the generators as needed after power is restored.

Using two rails to securely attach to the bottom of existing Alpha PWE-3 and PWE-6 enclosures, the Generator Expansion Module is fully backwards compatible and field installable.

ALPHA IN RUSSIA

AlphaTEK Russia

Overall, AlphaTEK's sales are up 30% above budget numbers for 2007 and the business growth sits at a strong 80% compared to 2006, without increasing our head count. Today, The Alpha Group is strongly positioned in the market and therefore, we can confidently project continuous growth in the coming years.

AlphaTEK continues to develop its distribution and system integration networks all over Russia. There are a number of new integrators signed up with us. One of the largest, being ElectronMash of St Petersburg. They have focused on Argus Cordex 220V systems from Argus resulting in USD \$500-750K annual volume of sales.

Another large integrator recently signed is TEV of Moscow and its affiliate systems in Ekaterinburg and Kazakn. Combined efforts of \$750K USD in sales have been achieved for 2007. Our current customer base is continuing to develop the business

with the St Petersburg and Moscow subways, Russian Railways and the FSB (formerly KGB) sites. One of the most important areas of focus is the Kremlin, where we provided back up power for surveillance cameras. Other equally important areas are heavy industry applications in different factories in the Ural Mountain region, the oil/gas platforms in Siberia and the remote telecommunications/wireless sites all over Russia.

As of today, AlphaTEK is building distribution for other Russia CIS republics with Kazakhstan, Georgia and Ukraine taking first priority.

Alpha (CATV)

In addition to the small and medium size accounts, large accounts like Comcor-TV and Pentakom keep ordering both the APX and XM2 from AlphaTEK. For example, Comcor-TV runs over 1000 APX's in Moscow, and we have an order for 500 more this year along with an approved quote for 500 XM2 systems.

The small and medium size systems all over Russia, such as Teleservice in Voronezh, have 5 to 25 systems running which looks promising for further consolidation and development of networks towards triple play where the CableUPS® solution is more critical than ever. Current booking forecasts in the cable business should also bring AlphaTEK solid sales in Kazakhstan and Ukraine.

Alpha (Single- and Three-Phase UPS)

In the past 8 months we have seen dramatic growth in three-phase UPS sales, bringing us large accounts from different sectors of the market. The most recent is a brand new hospital in Samara, where we will supply them with 100kVa-180kVa systems to back up operating rooms. Other accounts include a regional publisher in Stavropol, where we will provide backup to an industrial printer for a local newspaper and magazine and four brand new

Federal Government Buildings in Moscow, where we will provide server support.

At our newest account, MosVodoKanal, we will provide backup to one of the seven Moscow waste management plants. AlphaTEK won a tender against APC and PowerWare for the first plant. The project starts in Q3 of 2007 bringing EUR 700K in sales. The remaining six installations will be implemented between 2008 and 2009.

Finally, AlphaTEK along with Romsat (a distributor in Ukraine) continue to develop UPS sales to cable and telecom operators, and the plans look very promising for 2007 and 2008.



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Alpha's generator backup solution

Provides extended runtimes for critical traffic intersections

For several years, communities throughout the country have been investing in backup power for traffic signals – and as a result have significantly improved safety, reduced accidents and injuries and cut costs related to controller maintenance and police intervention.

Today, battery backup systems (BBS) have evolved to accommodate a wide range of environmental challenges and customer needs. With increasing occurrences of extreme weather affecting utility power, proactive cities are investing to ensure their intersections are kept safe in extended power outage situations. Following are examples of two cities incorporating stationary DC generator solutions to provide extended runtimes.

City of Suffolk, VA

In 2002, in response to brownouts, sags and spikes causing damage to traffic controllers, the City of Suffolk began looking for ways to provide clean power to its intersections. At the time, traffic intersections used incandescent lighting, which meant the cost of providing a power backup solution was much higher than it is today.

The City began working with Jim Merritt, President of Critical Power Systems Inc., a certified power quality professional with over twenty-one years of critical power expertise. A large concern for the city was its geographic location being the one and only land exit for the Tidewater area. Using any other route meant traveling through a tunnel or across a bridge; a scary thought when anticipating what could happen in the event of a hurricane or other natural disaster.

This was an emergency evacuation route in need of a special solution. The recommendation: Alpha's CFR UPS, which effectively corrected the problematic power. With independent systems installed at every major intersection between Suffolk and the Tidewater area, traffic could move smoothly regardless of the power grid's performance.

When a hurricane came through in 2005, Alpha's UPS systems kept the intersections operating for fourteen hours. This helped ease congested traffic, but in light of the recent devastation from Hurricane Katrina in New Orleans, the question was whether fourteen hours was long enough. So, Robert Lewis, City Traffic Engineer for the City of Suffolk began to look for ways to extend intersection runtime. Robert Lewis had particular requirements: an all-in-one, easy-to-install cabinet for his critical intersections.

"I worked very closely with Critical & Emergency Power Systems and RGA who in turn worked very closely with their manufacturer, Alpha Technologies," said Lewis. "Alpha took our Stationary DC Generator/UPS idea and ran with it. They came back with some conceptual ideas, which we provided input on and the solution was created."



“Alpha’s longstanding history of twenty-five years specializing in outdoor power backup, as well as their breadth of products allowing for numerous configurations, made them a strong power solution provider”

Jim Merritt, working together with Andy Keel, President of RGA, a manufacturer and distributor of traffic control products with over twenty years of traffic industry experience in the Mid-Atlantic area, suggested the hybrid Stationary DC Generator/UPS solution for unlimited backup time. Lighting at these intersections had since been retrofitted with LED bulbs, making the UPS choice much easier.

The system configuration was made up of the following: Alpha's FXM UPS and an AlphaGen™ stationary DC generator housed in an Alpha CE3X enclosure with sidecar attachment.

"Alpha's longstanding history of twenty-five years specializing in outdoor power backup, as well as their breadth of products allowing for numerous configurations, made them a strong power solution provider," Merritt said. "The AlphaGen™ was already a deployed product in the Cable industry meaning that the training and maintenance curve would be quicker and more efficient."

"Some of the other localities have expressed interest in this application," Keel said, "but it's not something that

can be done without planning. This is a new application and the investment is significant. We are missionaries telling a new story."

In order to justify the cost of such an application, there are many factors to consider. First, the cost of manpower is enormous when a large power outage occurs, as cities generally dispatch police officers to direct traffic at uncontrolled intersections and public works officials to repair costly damage. Additionally, when disasters such as hurricanes happen, affected areas are often heavily taxed in an effort to balance out the tremendous costs.

Suffolk is an outstanding example of a city that operates proactively to ensure its intersections remain safe in the event of an outage resulting from any range of causes including poor utility power and extreme weather conditions.

City of Overland Park, K

Bruce L. Wacker, Supervisory Civil Engineer for the City of Overland Park knows all too well what can happen in the event of a natural disaster. When struck with an ice storm in January 2002, over 30% of Overland Park's traffic lights were out at one point in time. While it is difficult to know the exact number, the police estimate that 15 traffic accidents occurred during this time as a result of darkened intersections.

In an effort to prevent this from happening again, Overland Park began investing in power backup for its intersections. Wacker describes his city's plan as a two-part setup. First, a UPS BBS was installed to run the traffic signal in the event of a power outage. When triggered, the BBS begins a time clock that sends the information to a generator. Next, if the utility power is still down after ten minutes, a stationary DC generator will start up, run to stabilize and then will take power and charge the batteries to run the signal. The generator backup system will continue to operate until the utility power is restored.

When planning a power backup strategy for any city, one big question is prioritizing

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Alpha Energy wants to take your commute off the grid

A national leader in turnkey photovoltaic systems and a member of The Alpha Group, Alpha Energy recently launched a solar charging station designed for electric vehicles.

The Solar Charging Station lets people take their short commute completely off the grid. People buy an electric vehicle to save money on gas and minimize their carbon footprint, but they still need to plug that vehicle into the century-old fossil-fueled power grid. The solar charging station enables people to harvest free electricity from the sun, which makes for carbon-free transportation.

We are very excited about the positive response this system received when we showed it recently at Solar Power 2007. Judging by this and the amount of information requests following the show, there is clearly a demand for a solar-powered commute vehicle

Alpha Energy's EV Charging Station is a scalable system combining Alpha PV panels with a power converter and charger to provide the necessary energy to recharge an electric vehicle. Systems can be installed on pre-existing structures like a garage or car port, or on a freestanding structure that can serve as a protective covering to shield your electric scooter from the damaging effects of the weather.



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Alpha purchases CE labs service/repair department

Alpha Technologies Services, Inc. recently announced the purchase of the CATV Services division of CE Labs, based in Garland, Texas.

"The foundation of Alpha Technologies is our commitment to high-quality technical services," said Fred Goodridge, Director of Technical Services for Alpha. "CE Labs has a long history of providing timely and professional technical services to customers already familiar with Alpha Technologies, so the fit here is perfect. Customers know Alpha for our cable standby power products, and they know CE Labs for the service backing up their Alpha systems."

The transition from CE Labs CATV Services to Alpha Technologies Services, Inc. was completed in May 2007.

"The biggest change for our customers will be the name on the trucks," Goodridge said. "Customers will continue to receive the same high level of service they've come to expect from the CE Labs technicians and from Alpha Technologies Services."

Argus accepts the Brazil challenge

Argus' first major contract in Latin America was with NEXTEL Brazil, valued at USD \$3.5M. This contract took two full years to implement followed by four lean years as a result of the Telecom bust.

In 2004, DELTA began manufacturing systems in Brazil, thereby making an existing low cost manufacturer even more competitive. Canadian manufactured goods could not compete against competitive products manufactured in Brazil. In addition, as a market share protection strategy, Brazil had long established high tariff barriers of 48 percent import duties. Therefore, through 2004 and 2005 Argus lost its lead position and market share to DELTA.

With the Telecommunications market again beginning to surge in 2005, Argus had to implement a strategy to access Mercosur, a preferential trading block in South America. This block consisted of Brazil, Argentina, Uruguay, Paraguay, Chile and Venezuela. In the late 1990's American and European Cell operators such as AT&T, Bell South, Telefnica, and TIM (Telecom Italia Mobile) invested heavily in this expanded region, creating a great opportunity for The Alpha Group.

The catalyst for Argus to make a move was when TELMEX, our largest Latin American customer, began to acquire mobile operators throughout South America under the banner of AmericaMobile. AmericaMobile now has a strong presence in every country in South America and Central America.

The decision to open a South American facility to access Mercosur was made in October 2005. Candidate countries included Brazil, Argentina, Paraguay and Uruguay. Brazil was the obvious choice, being a current Argus market along with several other influential regions.

The strategy behind opening an Alpha/Argus facility in South America was to improve business in the Latin American market and more specifically access the Mercosur region. Argus made the business case to establish a facility in South America on its own merit and any incremental sales or manufacturing of Alpha Group products would be considered encouraging.

But why Brazil? Brazil is the ninth largest economy in the world and the largest economy in Latin America. Its industrial sector accounts for one fifth of the South American economy's production. The country's scientific and technological development shows remarkable growth, which makes it attractive for direct foreign investments. Brazil has a highly qualified metal industry that successfully combines cheap labor with good quality materials. Brazil also has enormous potential for our products because of its large

population and multitude of telecom companies. With a factory in Brazil, it allows us to save on importing and exporting, therefore passing those savings onto our customers in countries within the Mercosur Agreement.

This was a "start from scratch" process and not an easy undertaking. With the assistance of Leo Kleiman, Peter Turnquest and Luis Galvis, the city of Santos, located 1.5 hours from Sao Paulo, was selected because of it being the largest port city in Brazil with a reasonable cost of living and adequate workforce.

After a lot of hard work, particularly on the part of Leo Kleiman, we were ready to accept our first contract in just over 12 months. This process involved the hiring and training of technical staff and the intense research of vendors that would meet the high level of quality required to serve tough markets throughout South America and potentially even the USA and Canada.

In addition to these challenges, new supplier relationships would need to be developed, some Argus designs would need to be altered so as to use local manufactured parts, and more equipment would need to be purchased in order to open the plant. Finally, the facility that was a dilapidated warehouse would need to be transformed into a manufacturing facility that would better suit our needs.

Today we can proudly say, "We are in business." First, we developed prototypes of Canadian products that

could be customized at a reduced cost to meet the needs and applications of the South American market. Today, we have shipped the VISTA line of products, seismic racks, box bays, various outdoor enclosures, and customized products for Brazil, that meet the unique requirements of the Latin American market.

We are on the right track. We have won back NEXTEL Brazil with an initial order for 210 systems valued at USD \$600K. Other contracts include Argentina NEXTEL with 76 systems valued at USD \$700K, MOVISTAR a subsidiary of Telefnica in Uruguay, Spain with 45 systems valued at USD \$200K, Paraguay TELMEX CTI MSO with systems valued at USD \$250K, MOVILNET in Venezuela with an open contract of 72 indoor and outdoor systems designed in Brazil, valued at USD \$850K, COGA the gas utility in Peru with 20 systems valued at USD \$200K.

Under the leadership of Leo Kleiman as Operations Manager, the new facility is staffed with a finance manager, a production manager, an administration person and four technicians. Additional technicians are being hired as demand increases, while Peter Turnquest provides financial oversight and Bryan Locker provides Operations oversight.



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Alpha Energy makes solar power systems more affordable

Alpha Energy recently began offering Power Purchase Agreements (PPA), making solar power system purchases more affordable and easier to acquire.

With all of the news coverage regarding rising energy costs and potentially dwindling fossil fuel supply, renewable energy like solar power is coming to the forefront as a reality and a necessity. A PPA gives environmentally-conscious individuals in leading organizations the opportunity to go solar without the large upfront investment.

The PPA is a long-term agreement between Alpha Energy, a third-party financier and the customer. In the agreement, Alpha builds a solar energy system on the customer's site, providing all necessary maintenance and operations for the life of the system. This photovoltaic system generates reliable, long-term clean energy for use by the customer. There is no up-front investment to the customer; customers just run their businesses as usual only paying for the solar electricity they consume. At the end of the PPA term, the facility can be purchased at fair market value or the PPA can be renewed on favorable terms.

With a PPA, Alpha Energy is enabling more companies to benefit from a green energy source. Aside from the eco-friendly nature of the energy source, the customer gets the assurance that a portion of their energy costs will be at a fixed price for two decades. That can be a great relief in an energy infrastructure that sees monthly, if not weekly or even daily fluctuations in energy costs.

The financial benefits of a PPA are many, ranging from no up-front capital investment to long-term fixed energy prices. But customers also gain from knowing they are incorporating the latest in photovoltaic solar energy generation, and from being recognized as a progressive community and corporate leader by embracing a technology that benefits both their business and the environment.



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which intersections will have BBS installed. Wacker took a visionary approach to this by installing BBS at all primary and many secondary intersections. Furthermore, every primary intersection was complemented with a CCTV camera.

These cameras continue to serve two purposes:

- Monitor traffic at large intersections with a UPS and backup generator.
- Zoom in to secondary intersections that can be monitored within a control center. When the control center sees that the secondary intersections are running on backup battery power, a portable generator is brought to the site, providing enough power to the intersection so it will remain in full operation until the power is restored.

Both the City of Suffolk and the City of Overland Park have taken proactive measures to address today's issues with utility power and traffic intersection safety. For more information about advanced battery backup systems, please visit www.rga-traffic.com, www.cepsi.biz, or www.alpha.com.



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WATTS NEW?

Visit www.alpha.com for upcoming events

Alpha:
BICSI - Winter
Orlando, FL
January 14-17, 2008

Brown User's Group
Minnesota
January 23-24, 2008

Brown Traffic User Conference
St. Louis, MO
February 20-21, 2008

Alpha Energy:
SCTE Emerging Technologies
Los Angeles, CA
January 14-16, 2008

Argus:
CITA
Markham, ON
February 24-26, 2008

ITA Telecom Association
Oregon, WA
March 4-5, 2008

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Power