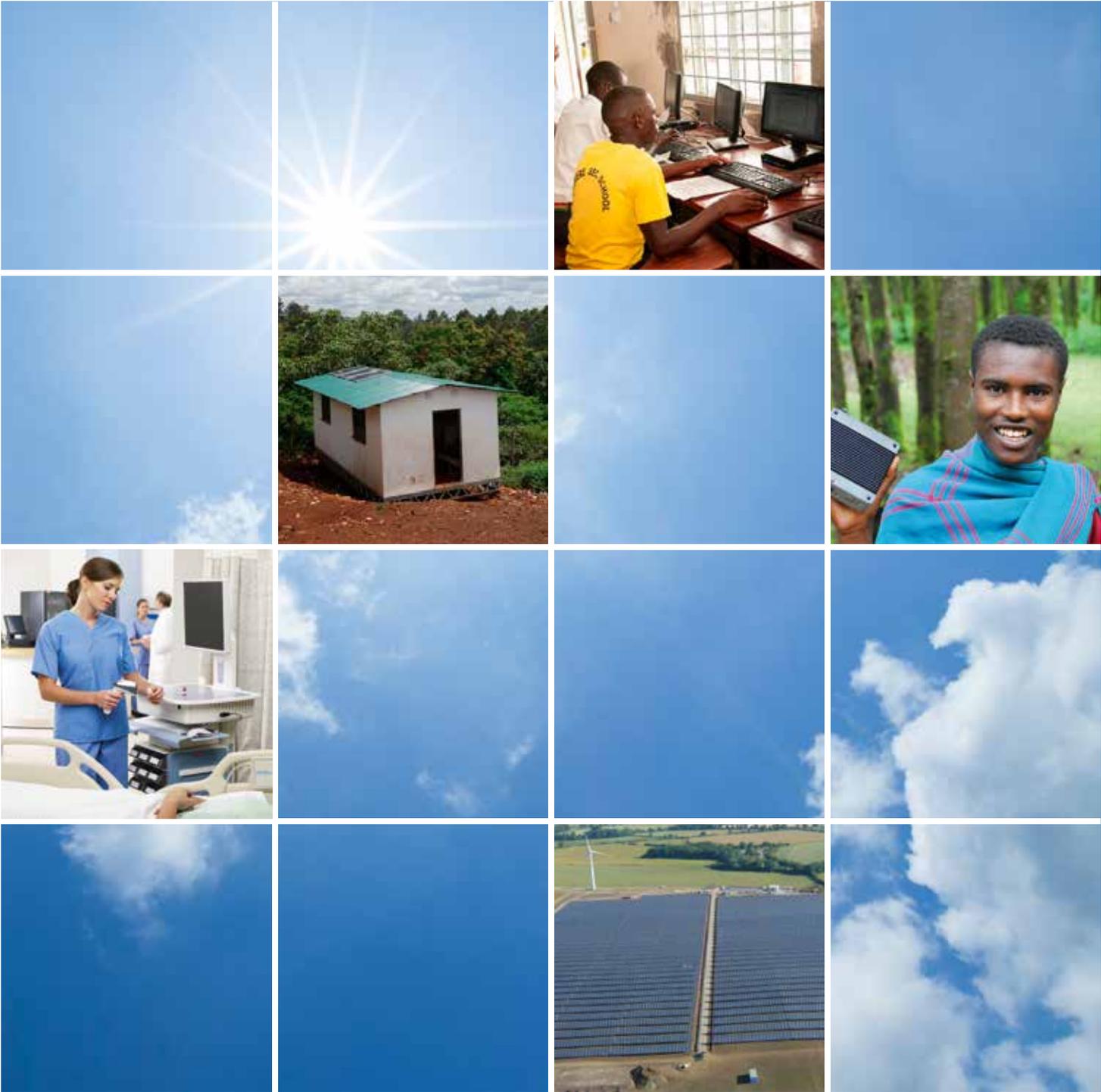The Computer Reborn

FANLESS TECHNOLOGY DESIGNED TO TRANSFORM LIVES

THE EXTREME AND THE EXTRAORDINARY

The remote Aleutian Islands lie off the coast of Alaska, a land of fire and ice that is home to some of the most challenging conditions on earth. The name Aleutia (pronounced al-oo-sha) is inspired by the ability of our computers to withstand the extreme and the extraordinary.

Response to a Problem

Aleutia was founded in 2006 by Mike Rosenberg as a response to the challenges he faced as a volunteer in Ghana, setting up an ICT classroom for homeless children. The donated, used HP desktops failed constantly and their high power consumption meant they could only run for a few minutes from a UPS during the constant power-outs.

Aleutia started with a mission to produce an affordable computer with industrial reliability and the low power consumption that would allow it to run longer on a UPS or run on fewer expensive solar panels. In 2007, we released our 8 Watt fanless, solid state E1 computer – a 200MHz thin client repurposed as a fat client with a local Linux OS and shipped to an off-grid school in the Amazon jungle of Ecuador.

Since that seminal product, we've pivoted, first embracing Intel Atom processors and becoming a manufacturer, and then using our knowledge of solar to provide turnkey container classrooms and clinics to enable ICT access and free healthcare in Africa. Time and again, we replace diesel generators with solar – substituting the dirtiest form of power for the cleanest.

We Make Things People Want

Aleutia has now become a multimillion dollar manufacturer without any debt or VC funding. As a result we've always had to build things the market wants.

Our technical customers around the world drive our innovation which then helps us reduce costs and achieve volume manufacturing for the schools and clinics in developing nations we work with.

With an in-house design and manufacturing team we're able to meet the unique needs of our customers, providing quality computers that are carved and crafted in the UK.

Aleutia is Global

Aleutia PCs can be found in over 65 countries, from Afghanistan to Zambia and from Greenland to Myanmar. Working closely with governments, private industry and the non-profit sector, Aleutia has provided its energy efficient, fanless and rugged PCs to power everything from oil tankers to maternity wards, delivering reliable products for whatever environment, whatever requirements and wherever in the world our clients are.

Aleutia computers have no moving parts and are extremely energy efficient

5 REASONS ALEUTIA COMPUTERS USE LESS POWER THAN TRADITIONAL COMPUTERS

1 Specialised low voltage Intel processors

N-Series (notebook) Atom

U-Series (ultra low voltage) i3/i5/i7

2 mSATA SSD (1W) instead of hard drive (5-10W)

3 Low voltage RAM (1.35V instead of 1.5V)

4 Smaller mother boards

5 Onboard integrated PSU (97% efficient)

POWER CONSUMPTION IN WATT

Aleutia R200 vs HP Z220 SFF*

| 39W |
| 215W |

Aleutia R200 Pro with Intel i7 Quad Core, Intel Graphics, 16GB RAM, 256GB SSD
HP Z220 SFF with Intel Xeon Quad Core, Nvidia Graphics, 8GB RAM, 225GB SSD

Computers designed from the ground up for reliability in rural Africa

Successfully deployed in 65 countries

Built to withstand Africa's high temperatures, humidity and dust ensures operation anywhere

THE 5TH GENERATION T1

Building on the continued success that the Aleutia T1 has garnered over its 4 lifetimes, the all new 5th Generation T1 brings astounding quality and a unique design to the newest model of this iconic computer.

As the Ideal computer for 90% of the World, the T1 in its newest guise, continues to deliver exactly what's needed to be the 'go to' computer for rugged environments around the world whilst offering a custom copper and aluminium design that makes it stand out from the crowd. Aleutia is the first PC manufacturer to extol the virtues of Solid Copper in its chassis design realising exceptional thermal capability and giving perfect performance in high temperature environments.

Continuing of course, the Aleutia ethos of fan-less, silent, no moving parts operation and reliability, this new generation holds up to the legacy that the T1 is famous for. It's ultra-low power consumption and 24/7 capability means it's application in hospitals, schools, restaurant kitchens and even on pipelines in desert conditions, the T1 delivers mission critical reliability in any environment with a TCO (Total Cost of Ownership) that gives exceptional value for money.

- ■ Nano ITX Proven Baytrail Platform
- ■ Dual Core
- ■ Up to 8 GB RAM
- ■ High Operating Temperature
- ■ Precision CNC from Solid Copper and Aluminium
- ■ Proudly Designed and Made in UK

Processor and Memory

Processor: Passively Cooled Intel® Bay Trail Celeron J1800 ,Dual Core 2 Threads 2.41GHz

Turbo to 2.58GHz ,1MB L2 Cache ,TDP only 10W.

Memory: 2GB, 4GB, or 8GB DDR3 SODIMM 1066MHz.

BIOS supports maximum of 8GB RAM.

Graphics

Chipset: Passively Cooled Intel Bay Trail Chipset Video/ Graphics: Integrated Intel® HD Graphics» Dual Independent Displays Supported through HDMI and VGA Port. Supports Maximum Resolution of 2048 x 1536.

Storage options

Storage: 120/240/480/1TB mSATA SSD

Connectivity

LAN:1RTLL8111E Gigabit Lan

LAN Features: PXE Boot and Wake-on-LAN supported

Optional WLAN: Intel® Dual Band Wireless-AC 7260 802.11.

Connections

Rear Audio Out, 1 x Gigabit LAN, 2 x USB Ports, or 2 x Gigabit LAN, VGA and HDMI display ports, 12v DC Input, Optional WLAN ReSMA Single Antenna Header, Optional RS-232

Front Audio In, 2 x USB 2.0 Ports, On/Off Mechanical IP66 "Halo" Button with blue power LED. 1 x COM (CISCO RJ45)

Power consumption & details

Power Supply: 98% Efficient Onboard PSU. Operates on 12v DC.

Power Consumption Standby: 1.2 W

Power Consumption   Idle: 6.0 W

Power Consumption   Peak 18 W

Mechanical information

CNC Copper and Aluminium
Fanless Design » Ventilation Protected from Dust

Operating Conditions

Fanless Temperature Range: -10° to 60° C, 90% Humidity

Mounting options

Stand: allows VESA to be used in upright position.

THE ALL NEW R50

The All New R50 seamlessly blends form and function, featuring an Intel® NUC 5th Generation i3 and unique custom case, as striking as it is innovative. Aleutia's ground breaking use of solid copper in the chassis gives the new R50 thermals that others find impossible to beat, allowing high performance at temperatures up to 50C.

With M.2 SSD and up to 16 GB of high speed RAM, this newest version of the R50 gives exceptional performance and a use profiles as diverse as your imagination.

Currently gracing Super Yachts and Monitoring wind farms in the North Sea, the R50 delivers 24/7 high performance in a myriad of applications.

- 4K playback
- Beautiful CNC Solid Copper and Aluminium heatsink chassis
- Up to 16 GB RAM
- 65° C Operating Temperature
- Proudly Designed and Built in the UK

IT'S AS VERSATILE AS YOUR IMAGINATION

Processor and Memory

Processor: Passively Cooled Intel® Core™ i3-5010-U Processor (3M
Cache, 1.80 GHz)
Memory: 4GB, 8GB and 16GB DDR3 SODIMM 1600Hz. BIOS supports maximum of 16GB RAM.

Graphics

Chipset: Intel Intel® HD 5500
2x Mini Display Port.
Single Display: 3840 x 2160 @60 Hz, 24bpp. Supports 2 monitors at:
3840 x 2160 @60 Hz Or single 4K monitor. R50 can support simultaneous 2 x 3840 x 2160 and 1 x 1920 x 1200

Storage options

Solid State Drive: 60/128/256/512GB M.2 SATA

Connectivity

LAN: 10/100/1000 Mbps Ethernet Controller
Ventilation Protected from Dust
LAN Features: PXE Boot and Wake-on-LAN supported
Optional WLAN: Intel 1030 150MB/s 802.11 b/g/n

Connections

Front I/O: 2 x USB 3.0 Ports, Power LED, Audio jack.
Rear I/O: Gigabit LAN, 2 x USB 3.0 Ports, 2 x Mini HDMI Display Port, 11-19V DC Input, WLAN RSMA Dual Antenna Header

Size & weight

Weight: 1.100 Kg
Size: 164 x 110 x 46 mm (Width x Depth x Height)

Power consumption & details

Power Consumption:
Standby: 1.9W (Tested on AC Mains with system in sleep mode and headless).
Idle: 62 x .4W (Tested on AC Mains with Monitor Connected and USB Mouse and Keyboard Connected, Windows 7 on SSD).
Peak: 21W (Tested on AC Mains with CPU, Chipset, RAM, and Drive maxed at 100% using Futuremark 2010 software).
Power Supply: 96% Efficient 12V DC PSU (11-19V Range). Can Run
Directly from 12V battery - No Regulator Required.
AC Adapter:Wall Mount UK 3.3A AC adapter. For Australia, US, EU,
supplied with 3.3A Brick Adapter with IEC Plug.
UK, EU, US, Australia Plug selected automatically based on delivery
address.

Mechanical information

Ventilation Protected from Dust
Body 100% Fanless Design
CNC Copper and Aluminium Chassis

Operating Conditions

Fanless Operating Temperature Range: at -15° to 65C

Operating system

Compatible with Microsoft Windows 7 and 8

Compatible with Ubuntu Linux (12.04)

CUSTOM

Our in-house design and manufacturing team allows us to create solutions as unique as our customers.

UNICUBE

Solar powered digital cube featuring offline content and online capabilities for easy access in youth and community centers.

M200

Designed for Nordic Tankers, one of the world's leading oil carriers, the M200 is a silent, waterproof, fanless server with industrial enterprise performance.

LEICA GEOSYSTEMS

With their strapline 'When it has to be right', Leica looked to Aleutia to provide a custom machine that could monitor their geosystems and meet their exacting standards for providing safety in rugged situations. In tunnels or mines, on hilltops or watching high rise buildings, the Leica L Box gives peace of mind when linked with Leicas state of the art, Geomonitoring solutions.

'More and more jobs and educational opportunities in today's connected world require a basic understanding of how to use a computer, basic word processing, and the internet; and youth who do not have these skills will have a difficult time bridging this digital divide...The open-source design collaboration is bringing together UNICEF's expertise, knowledge of the specific needs and already established access to partners with Aleutia's professional experience in high-quality product design and development.

Stephan Bock, Unicef: Technology for Development, Uganda

HEALTHCARE

Transforming Healthcare in Africa

Our eClinic Healthcare Solution is designed to accelerate and transform patient care in Africa. Paper systems suffer from inaccuracy and delay. Traditional computers suffer from power cuts and existing healthcare software requires expert knowledge. We combine rugged, solar computers with easy to use eClinic software to capture digital patient information anywhere. Uploaded via 3G daily and with a powerful Cloud-based dashboard and reporting services, we provide the tools and Big Data needed to decide how best to use resources and determine policy.

Nigeria's adoption of this breakthrough approach can provide a platform for healthcare transformation across Africa.

SOLAR CONTAINER eCLINIC

A self-contained, pre-fabricated primary care centre that runs entirely on solar and can be rapidly deployed anywhere. Already operating at 18 sites in Oyo State, having served over 80,000 patients thus far.

eCLINIC SOFTWARE

Developed from the ground up by Aleutia, our eClinic software can be used by nurses with no previous ICT experience. eClinic empowers them with the ability to view primary and secondary symptoms to form an accurate diagnosis and follow a treatment pathway, all then uploaded to the eClinic Cloud.

eCLINIC CLOUD DATABASE

All patient records, diagnoses, treatments and prescriptions are securely backed up daily by 3G or GPRS from each clinic to Aleutia's eClinic Cloud which provides a visual display of vast quantities of data.

EDUCATION

We are committed to levelling the playing field by empowering children in developing countries with the same access, content, and ICT experience as in developed countries.

What makes us work?

Aleutia PCs are fanless, rugged, reliable and DC-powered. They have no moving parts which means less chance of failure in dusty environments. Our unique designs feature the only copper exterior in the industry--meaning the PC case itself acts as a heatsink to keep our computers running in temperatures of up to 50C (122F). We use notebook components and Intel(R) processors to achieve energy efficiency, and solid state drives instead of hard drives to provide the reliability of no moving parts. Further, while traditional PCs rely on AC power--an often inconsistent luxury in developing nations--Aleutia computers run exclusively on DC, making it easy to run on simple solar solutions or provide significant savings when running on mains.

What we've been doing

In 2010 we released our 'Solar Classroom in a Box', which can now be found in thirteen Sub-Saharan African countries including from Sierra Leone to Angola to Uganda.

SOLAR CLASSROOM IN A BOX
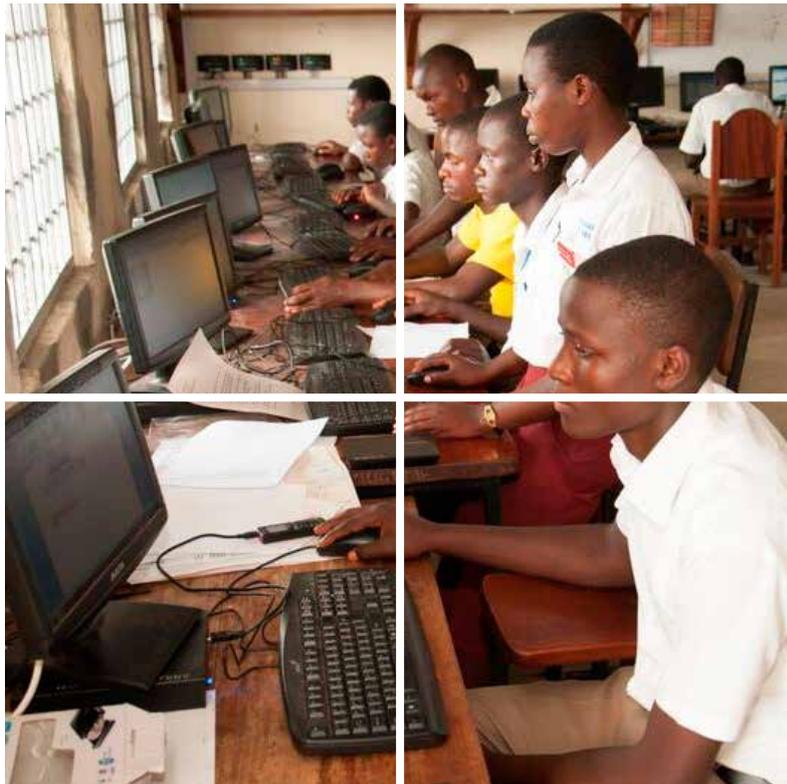
Deployed in over 13 developing nations

Finalist for the 2015 INDEX: Design for Life Awards

Serving over 240,000 children and counting

The solution contains all the elements you'd need for a 10-person computer lab, in a pallet-size box that fits in the back of a pickup truck and can be installed by local laborers in just 24 hours.

Starting in July 2015 we've taken this further by designing and locally building prefabricated classrooms to enable a modern learning experience. Sponsored by Safaricom, the country's largest telecom provider, the rollout will offer one classroom per county, making it the biggest and most equitable ICT deployment in Africa.The schools will service over 20,000 children, many of whom will be experiencing using a computer for the first time.

Every computer comes furnished with Wikipedia and innovative open-source educational software that feeds back data and metrics allowing us to continually improve the impact our computers can have.

Transforming UK education

Aleutia's silent, reliable, energy-saving PCs power some of the UK's leading educational institutions from primary through to the university level. The same product that is transforming education in Africa can be found enabling the UK's brightest young minds--while saving each school thousands of pounds in energy costs. The direct to DC advantage of an Aleutia computer means less energy consumption, and lower energy bills, without losing any power or reliability.

SOLAR CONTAINER CLASSROOM

Aleutia is Africa's largest Solar Container Classroom provider

Part of Kenya's largest CSR program in country's history

Fraction of the cost of competitors Samsung and Dell

OUR EDUCATION PARTNERS

CASE STUDIES

1. MAKING GHANAIAN GIRLS GREAT! (MGCUBED)

Transforming the lives of Ghanaian girls through engaging distance learning

Making Ghanaian Girls Great! (MGCubed) is a first-of-its-kind project focusing on 'interactive distance learning'. Their aim was to provide 72 government schools with solar powered computers and projectors and broadcast live teaching sessions from studios in Accra. The pioneering project would impact more than 5,000 marginalised girls within two regions in Ghana (Volta and Greater Accra) and offer them an enhanced quality of education and transform their future.

2. UNIVERSITY OF CAMBRIDGE

High energy bills and limited space Libraries and research areas at University of Cambridge's colleges and institutes include computer rooms that serve their students 24 hours a day. Using industry-standard tower computers leads to high energy bills and because of Cambridge's famed classic architecture, the rooms are sometimes small, with no air conditioning.

"I've been buying Aleutia machines for 5 years. We use them for student and staff desktops and for system management tasks. They're small and quiet, energy-efficient and reliable and they're powerful enough to run the latest office applications."

Steve Kimberley, Computer Officer, Faculty of Classics, University of Cambridge

3. ASHFORD ST. PETERS

Over 100 Aleutia computers providing better battery life for PC Carts and critical diagnostics in surgery theatres

Normal carts utilising run of the mill AC powered computers typically depleted the battery operated carts down in just 3-4 hours. Using Aleutia T1s in their carts saved huge amounts of time for staff and increased patient care time

4. PROGRAMME ABC

Working with Access to Basic Care (ABC) Foundation in Nigeria, Aleutia provided not only its rugged, low power computers but developed diagnostic software in-house to enable nurses to register patients and go from symptom to diagnosis to treatment. Deployed at 48 prefabricated rural clinics, our solution (hardware, software, solar) enables rapid patient throughput with over 1200 patients treated daily, and all records backed up to the cloud.

5. BROMFORDS

When a new 'Green' building was built as an extension to the school, it was built without heating or air conditioning. The normal legacy tower computers started to perform badly and eventually overheated and subsequently failed.

 Network Manager, Andy Hill, contacted Aleutia and after some discussion and evaluation, bought 200 T1s for the school, but specifically kitting the new building to alleviate the problem. Many have utilised the VISA mounting option which saves them additional desk space and frees the cupboards for other uses.

Andy say: ; Aleutia saved us space, gave us reliability and reduced maintenance costs and then saved considerable money is the electricity bill. A win all round for the school!'

6. UCC

Providing ICT access to more than 40,000 students at 113 schools in rural Uganda

The vast majority of these schools are in remote areas without any access to electricity.Uganda Communications Commission (UCC) needed a solution that was affordable and could run on solar.

Aleutia worked closely with UCC in Kampala to replace their existing solution with the more fit-for-purpose Aleutia T1, a fanless computer designed to handle areas with lots of dust. The T1's 8-20V DC input meant it could also run directly from 12V batteries without requiring an AC inverter. 10 x T1 computers and 12V monitors, were installed at each school.

That's 1243 computers and servers, all running on sustainable solar power.

7. PRET

Aleutia's T1 is used in every Pret a Manger cafe in the world from Chicago to Manchester to Hong Kong, connecting to banks of Toshiba POS systems and running Windows Server it provides an ultra reliable platform for data analysis, allowing London head office to monitor thousands of sales of croissants, lattes and its signature sandwiches in real time.

8. BARCO

Barco is a US technology giant that operates in a variety of sectors, but have a particular focus on Patient Care solutions. Aleutia provided an advanced set top box that enabled a leading edge Point of Care service by combining a 42 LG TV with an Aleutia T1 computer. This allowed patients to use them to navigate through entertainment, as well as to take surveys and browse the web.
Deployment in 102 private rooms at Bermuda Hospitals Board, Barco has deployed over 1500 of these projects to date.

OUR COMPUTERS ENABLE GREAT PROJECTS

ALEUTIA HAS ENABLED US TO MAKE OUR VISION A REALITY

Mrs Florence Ajimobi,
First Lady of Oyo State

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