

St Elisabeth's Catholic Primary School
Webster Street
Litherland
L21 8JH

FAO – The Eco Council

18th October 2016

Dear Eco Council Members

Extreme Low Energy (ELE) have enjoyed hearing about your school and the Eco Council, the projects around recycling and cycling to school are fantastic.

ELE offer a unique and exciting technology providing computers that run on very low energy and can be powered from renewable energy sources such as solar. We thought our technology may be a great project for your school and the Eco Council.

We can provide to the school a 19inch LED monitor with an Intel Celeron NUC mini PC, keyboard, mouse and monitoring plug alongside a mini solar panel. This will allow you to generate solar energy and power the computer. The plug will allow you to monitor this computer but also others within the school so you can compare the energy usage.

I have attached a data sheet providing more technical information should you wish to review prior to making your decision. I also attach a brochure offering an overview of the ELE technologies for schools and a case study example.

Should you have any questions or require any further information please do not hesitate in contacting myself via email caroline@extremelowenergy.com or telephone 07572 075 975.

I look forward to hearing from you.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Caroline Clayton', followed by the initials 'PP'.

Caroline Clayton
Operations Director
Extreme Low Energy

ELE-SOLARPC: Intel Nuc Series (19.0")

The ELE Solar Powered Computer and Monitor offers the high performance you'd expect from a state of the art desktop PC, whilst utilising ELE's unique ultra-low energy technology to maximise operational time.

Designed with the off-grid or intermittent grids in mind, the ELE-SOLARPC is a fully DC system, eliminating the wasteful AC-DC conversions, inverters and UPS devices typically needed by other off-grid PC systems.

Installation is very straightforward – mount the solar panel in a convenient location, run the DC cable to the ELE-SOLARPC, plug in and switch on.

Monitors are 19, 22 & 24" sizes with touchscreen options, and the attached mini-PC in offers Celeron, i3 or i5 CPU with up to 16GB ram and up to 1TB SSD options.

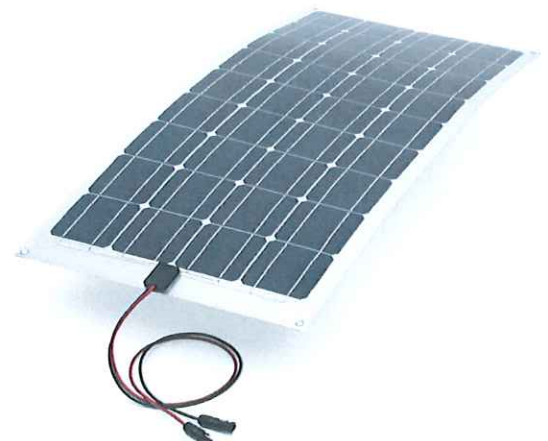
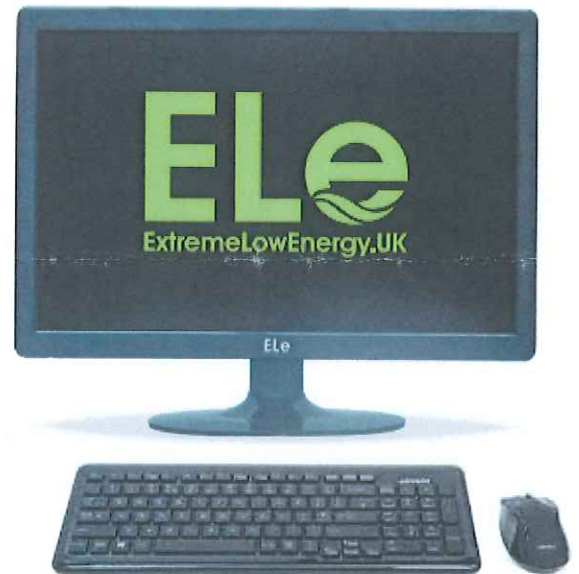
ELE-SOLARPC's use quick Intel processors and solid-state hard disks, so boot-up times are fast, and the user experience is excellent. Yet the ELE-SOLARPC uses only 20 watts of electricity when running normally and virtually 0 watts in standby.

Operational runtime is up to 12hrs from the integrated 20Ah battery. Larger capacity batteries are also available.

Maintenance is easier and cheaper than with an equivalent laptop or other type of integrated PC – if any single component such as keyboard, mouse or screen are damaged or faulty, they can be easily and cheaply replaced on site with minimal disruption.

Summary

- Plug & Play off-grid PC with integrated solar charge controller and battery.
- High resolution, energy efficient LED-backlit LCD monitor, fast response time, superior contrast ratio.
- PC with Intel® Inside® chipset uses standard firmware and drivers. Quad Core™ processor with high performance solid state hard drive
- Lightweight solar panel makes installation simple – can be mounted outdoors (eg rooftop) or inserted into a sunny window.



Data Sheet



Main Specifications

Product Description	ELE-SOLARPC19CEL - LED monitor with Intel PC, integrated battery and charge controller
Processor type & chipset	Intel
Processor Speed	2.08Ghz
Memory	Optional 2/4/8GB RAM, up to 1TB SSD
Operating System	Optional Microsoft Windows or Linux
Connectivity	Optional USB WiFi or 3G/4G
Optical Drive	Optional USB DVD-ROM
Monitor Type	LED-backlit LCD monitor - 19.0", 22" or 24" option. Touchscreen also available.
Aspect Ratio & Resolution	16:9 Widescreen, 1440 x 900 at 60 Hz
Brightness & Contrast Ratio	250 cd/m2, 5000000:1
Response Time	2 ms
Colour Support	16.7 million colours
Case Colour	Black or White
Dimensions (WxDxH)	44.7 cm x 4.7 cm x 30.0 cm - without stand (H36.4 cm with stand)
Weight	4.2 kg

Power Management

Power Supply Input	Low voltage Solar solution – 12V DC
Internal Battery Energy Storage	20Ah
Power Consumption - Operational	20-25 Watt (depending on brightness setting)
Power Consumption – Stand-by/Sleep	45 mw/35mw

Dimensions & Weight

Dimensions & Weight	With PC & stand - width: 44.7 cm - depth: 16.9 cm - height:36.4 cm - weight:4.2 kg
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Manufacturer Warranty

Service & Support	3 year Limited Warranty - RTB
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Solar Power

Output Voltage	12V DC
Solar Panel Output Power	40W (Cell Efficiency > 22%)
Solar Panel Size	535mm x 415mm

Environmental

Working Temperature	0°~55°C, Storage Temperature: -20°~ 75°C
Working Humidity	10%~90%, non-condensing
Storage humidity	10%~ 95%, non-condensing

