

WestCam(Pty) Ltd

Crabtree Endurance Panel System Familiarisation

Order No 4700071621

Work Report

08/06/2023

Familiarization with Software

We are confident that we have a thorough working understanding of the software and will be able to support the system and implement changes going forward.

Software Changes Implemented to Date

1. Minor changes have been made to improve the code readability.
2. Comments have been added
3. Front panel objects have been moved and resized
4. Web server control has been added

The source code is available at <https://www.dropbox.com/scl/fo/t4wff7xnnjmvj557pfvax/h?dl=0&rlkey=u158wt0hxtc7idbskdylvyurw>

Software Installer

The software was written in LabVIEW 2013 and it is no longer possible to download this without an active National Instruments software subscription. WestCam has a full version of Labview 2017 and installers and for this reason the Endurance Panel software installer was created using LabVIEW 2017. This does not affect the function of the current system but allows for modifications in the future.

The installer is available at <https://www.dropbox.com/scl/fo/t4wff7xnnjmvj557pfvax/h?dl=0&rlkey=u158wt0hxtc7idbskdylvyurw>

Email Fault

Connection to the email server using the method used by the LabVIEW software is not possible. This has been tested both with the LabVIEW software and by other low-level methods. This is possibly due to increased security implemented on the mail server and requires discussion with the server administrator and possibly examination of the email server logs.

Details

In the Lab Panel software the connection is opened but the error indicates that no response is

received from the mail server.

Low level methods tested are:

1. Using Telnet in the Windows command prompt to connect to the mail server on port 25. The connection is closed immediately No errors are returned.
2. Using Windows PowerShell to create an SMTP mail object. An error was returned which implied that the connection had been refused or closed by the server

Temperature Measurement Fault

This has been resolved

Web Interface

The Web interface can be accessed using Microsoft edge only and it must be configured to run in Internet Explorer mode. Instructions are in the Technical Manual.

Note that the web interface is not well supported and we suggest using a free tool such as Microsoft Remote Desktop or NoMachine

Power Supply Replacement

It is recommended that the existing motherboard and power supply are removed and replaced with a power supply such as a Meanwell RD-85A, available from Current Automation

(<https://rectifier.co.za/>)



85W Dual Output Switching Power Supply

RD-85 series



■ GTIN CODE

■ Features :

- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- LED indicator for power on
- 100% full load burn-in test
- All using 105°C long life electrolytic capacitors
- Withstand 300VAC surge input for 5 second
- High operating temperature up to 70°C
- Withstand 5G vibration test
- High efficiency, long life and high reliability



The mains supply to this should be switched through the panel power switch which will **needs to be replaced as it is damaged.**

USB Cable Access

We suggest mounting panel mount socket to socket connectors such as those shown below on the LAB06 panel to allow for USB connection to the new PC. The are available from RS Online (<https://za.rs-online.com/web/>)

RS stock no.: **124-6393** | Manufacturer: [RS PRO](#)

