

EPOP500c COVERLESS

Models 500c, 500, 300c 300

A brief description of our product is as follows:

The RF transceiver implements bidirectional RF communications with a remote unit under the control of the integrated microcontroller. The microcontroller timing is derived from the 32kHz crystal.

A 26 MHz crystal forms the fundamental clock which is multiplied up by the PLL (phased locked loop) to a pre-programmed carrier centre frequency in the range 902.5 to 927.5 (902 to 928 MHz band boundaries).

In transmit mode the internal GFSK modulator generates a modulated carrier which is amplified by the integrated power amplifier (PA) with differential output. The Power amplifier output is fed to a balun which converts the signal to a single ended form and a low pass filter ensures that harmonics are attenuated to below the limiting values as specified in the relevant standard. The filtered RF output is fed to the PCB track antenna.

In receive mode, the received signal from the antenna is fed via the low pass filter and balun into the low noise amplifier (LNA) where it is amplified and demodulated. Received data is stored in internal memory or optionally fed to the off-chip flash memory. The LCM is updated by the integrated microcontroller retrieving image data from the flash memory and forwarding it to the LCM data register. The DC/DC converter running at 300kHz generates suitable bias voltages which in combination with the

Image data temporarily buffered in the data register cause the image on the LCM to be updated a line at a time in accordance with the binary pattern in the buffered data.

1. The equipment models that we wish to have added to the test report are as follows.

- a. 500c (0 to 40 degree product)
- b. 500 (10 to 40 degree product)
- c. 300c (0 to 40 degree product)
- d. 300 (10 to 40 degree product)

Please note the only difference between a 500c and a 500 is the operation of the LCM at temperature.

2. The rated voltage is 4.5V which is 3 off batteries at 1.5v in series.

3. The maximum Tma for both products is 100mA Max for 20 uS. Quiescent current is 4uA max.

4. The Wongs file is now shut. The address that you should be using for our products is

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5. This is a battery operated product sold in volume no safety instructions are sold with the product.
6. The Caution for replaceable batteries will be added to the cardboard box. Either via a label and eventually will be included in the artwork for the box.

If you have any questions or comments please do not hesitate to contact me.

Yours faithfully

Francis Kent

Principal Product Engineer

ZBD Displays Limited

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