

# CONCEPT OF MONITORING DEVICE FOR AMATEUR RADIO MARKET

HAMIOT-1

Copyrights Arie Lukkassen JE1RYS









#### **Browser Device**

WWW Internet or Intranet Core ESP8266

Copyrights Arie Lukkassen JE1RYS

IOT DEVICE WITH THE FOLLOWING HARDWARE ATTRIBUTES:

- H/W ESP8266 STANDALONE OR MASTER SLAVE CONFIG WITH EXTRA MICRO
- PSU 5- 15 VOLT / BACK-UP BATTERY FEATURE 72HRS BATTERY DESIGN
- USB POWER PLUG COMPATIBLE (OPTION)
- MEASURE VOLTAGE 0.25-15VOLTS 2 INPUTS
- MEASURE CURRENT 10mA-50A
  1 INPUT (OPTION 2 INPUTS)
- TWO TEMP SENSORS (-10...100 CEL)
- HUMIDITY SENSOR (OPTION) (10...90%RH) / WATER SENSOR INPUT (OPTION)
- 4 DIGITAL IN NC/NO USED FOR OCCUPANCY / STATUS / ALARM INPUT
- FOUR RELAY OUTPUT 250V 2 AMPS FULLY GALVANIC ISOLATION OF MINIMUM 1kV. WITH STATUS LEDS
- TARGET 2% ACCURACY ON INPUTS / 0.25 % (OPTION)
- SWR BRIDGE ELECRAFT INTERFACE (OPTION)
- ALL INPUTS AND OUTPUTS PROTECTED UP TO 250V FOR 5 SECONDS
- TARGET PWR CONSUMPTION MAX 100mA.
- FULL SIZE CONNECTION TERMINALS
- ULTRA RELIABLE DESIGN ( OPTION DEPENDING TARGET MARKET)
- I2C INTERFACE FOR H/W TO S/W CURRENT MEASUREMENT IC TO MICRO, SENSORS, ETC.



#### **Browser Device**

WWW Inter or Intra

Core ESP8266

IOT DEVICE WITH THE FOLLOWING SOFTWARE ATTRIBUTES:

- CONFIGURATION THROUGH WEB ENABLED DEVICE AND IPHONE COMPATIBLE .
- EASY TO USE INTERFACE. (WHOW FACTOR )
- PASSWORD PROTECTED / NOTIFICATION OF SUSPICIOUS ACTIVITY
- IP COMMS "OK" THROUGH LED STATUS. / WATCHDOG FUNCTION
- CALCULATIONS: AVG POWER / MAX POWER / POWER USAGE TREND 1 HRS / 4 HRS / 12 HRS / 24HRS / 7 DAYS / MONTH / YEAR. RESET THROUGH SOFTWARE
- E-MAIL CLIENT FOR ALARM INPUT / STANDBY POWER / EXCEEDING PRESET: VOLTAGE OR CURRENT / TEMP / HUMIDITY.
- SMOOTHING OF ANA INPUTS.
- RUN TIME HRS FOR DIG INPUT / DIG OUTPUT WITH RESET CAPABILITY
- TIME SCHEDULE OPTION FOR DIG OUTPUTS.
- CLOUD DASHBOARD AND HISTORICAL STORAGE ANALYSIS . ( OPTION)
- RS232 COMMS FOR TRANSCEIVER SETTINGS WITH FEEDBACK (OTION)
- IP CAMERA INTEGRATION ( OPTION)



WWW Inter or Intra

Core ESP8266

#### IOT DEVICE WITH THE FOLLOWING CUSTOMER CHARACTERISTICS:

- CLEARLY IDENTIFIED BY TARGET MARKET FIRST TARGET MARKET IS HAM RADIO OPERATORS
- VERY EASY TO CONFIGURE
- 99.97% UPTIME
- SAFE NO OVERHEATING
- EXCELLENT DOCUMENTATION IN J/E
- EASY TO DIAGNOSE HARDWARE CONNECTION PROBLEMS
- VOICE INTERFACE (OPTION). FOR EXAMPLE VOICE WILL SAY "OUTPUT-1 IS ON"
- CLOUD NO MAINTENANCE FEE FOR INITIAL DATA STORAGE
- KIT VERSION AND PROFESSIONAL BUILT VERSION / ATTRACTIVE HOUSING
- PERCEPTION OF PROFESSIONAL PRODUCT EXCELLENT VALUE FOR MONEY.
- CUSTOMISATION IS AVAILABLE AS AN OPTION



**Browser Device** 

WWW Inter or Intra

Core ESP8266