

# M-STAMP



## MULTI SENSOR STABILIZED MINIATURE PAYLOAD

The M-STAMP is a member of the STAMP STAbilized Miniature Payload family, which was developed to meet demanding Intelligence, Surveillance, Reconnaissance and Targeting (ISRT) missions on Small UAV (SUAV) platforms. The STAMP systems provide maximum sensor range performance by using highly sensitive sensors, gyro-stabilization and unique video enhancement algorithms. CP Technologies' STAMP family of EO/IR systems are ruggedized for high shock landings, which are common amongst SUAV platforms.

CP Technologies' STAMP family of miniature EO/IR systems have been in worldwide daily operation for over a decade, on a wide variety of SUAVs, drones, VTOLs and aerostat platforms.

### APPLICATIONS

- Realtime Situation Awareness and Tactical Response
- Over-the-Hill Reconnaissance
- Special Operations
- Force Protection
- Maritime Patrol
- Law Enforcement
- Search & Rescue

### FEATURES

- Superior Gyro-stabilized Image
- Single LRU System
- Three (3) Gimbal System
- Accurate Geo-locations
- Advanced Image Processing
- Lightweight and Compact Design

## Who We Are

CP Technologies designs, fabricates and integrates standard and customized high-performance computing platforms and LCD monitors for military, industry, and commercial applications.

Using COTS components, CP Technologies provides solutions for customers who need reliable systems that will operate in a variety of harsh conditions and who require revision control and hardware consistency for multi-year programs.

CP Technologies is an ITAR Registered and ISO 9001:2015 Certified business that has been operating in Southern California for over twenty years.

**Assembled in the USA**  
**ISO 9001:2015 Certified**  
**ITAR Registered**

**CP Technologies**  
2620 Deep Well Ranch Rd  
Prescott, AZ 86301  
combatproven.tech  
858.571.4330



# TECH SPECS

## ELECTRO-MECHANICAL

<b>Type</b>	3 Gimbal Gyro-stabilized System
<b>Field of Regard</b>	P: +70° to -40° (Belly Mount +15° to -95°) R: +/- 170° (Optional 360° x N)
<b>Angular Velocity</b>	Up to 60°/s in Roll Up to 30°/s in Pitch 1.0° (1 $\sigma$ ) relative to A/C

## PHYSICAL SPECS

<b>Weight</b>	3lbs / 1.36kg
<b>Dimensions</b>	6" (152mm) $\varnothing$ x 7" (178mm) H
<b>Operating Temperature</b>	-10° C to 45° C

## OPTIONAL

- Automatic Video Tracker
- Laser Pointer (0.8  $\mu$ m)
- Nose or Belly Mounting
- Inertial Navigation Modes
- Video Embedded Telemetry

## IMAGE PROCESSING

- Local AGC
- Video Enhancement
- Picture-in-picture (PIP)

## HD DAYLIGHT CHANNEL

<b>Camera</b>	CMOS High Resolution Color 1280x720
<b>Lens</b>	Continuous Zoom x20
<b>Field of View</b>	720p: 5° to 50° horizontal FOV PAL/NTSC: 2° to 40° horizontal FOV Elec. Zoom x4

## THERMAL IMAGING (TI) SENSOR

<b>Spectral Range</b>	8-12 $\mu$ m
<b>Detector</b>	Infrared, Un-Cooled Microbolometer, Amorphous Silicon
<b>Lens</b>	640x480 Pixel FPA (Pitch 17 $\mu$ )
<b>Field of View</b>	37° (WFOV) to 11.7° (NFOV), continuous optical zoom x3.2 Elec Zoom - 3°

## ELECTRICAL INTERFACE

<b>Voltage</b>	24 VDC
<b>Consumption</b>	16W
<b>Video Out</b>	NTSC/PAL, RS-170, CCIR

### QUESTIONS?

Reach out to us at  
combatproven.tech  
or call 858.571.4330

## ENGINEERED TO YOUR SPECIFICATIONS

- In-house engineering department
- Design and build of rapid prototypes. Experience with solving difficult customer application problems through knowledge of the industry and custom system design and manufacturing capability
- Our Engineers use Solid Works 3D CAD modeling software for mechanical design and thermal simulation
- Design experience with MIL-STD-167, MIL-STD-461, MIL-STD-810, and MIL-S-901, in addition to FCC, UL, CE, and country specific agency requirements

## REVISION CONTROL & CONFIGURATION MANAGEMENT

- Our Program Managers will assure your products are revision controlled for the life of the program
- Configuration Management to assure TAA Compliance and system compatibility
- One part number for life of the program
- Counterfeit and obsolescence management

## FACILITY AND TEST

- All integration work is performed in a state-of-the-art, ESD-controlled facility
- Our facility has 23,000 sqft and has dedicated 12,000 sqft to manufacturing and 3,000 sqft to engineering
- Operate to anti-static standard ANSI/ESD S20.20-2007 and electronics assembly standard IPC-A-610, Revision E-2010

## QUALITY COUNTS

- ISO 9001:2015 Certified
- 100% system inspection before shipment
- All integrated systems undergo a minimum 24-hour system test and burn-in before shipment to the customer
- Assistance with 3rd party verification of system specifications
- 5-year warranty on all servers and 3-year warranty on LCD monitor products
- TAA compliant
- Built in the USA

**CP Technologies**  
2620 Deep Well Ranch Rd  
Prescott, AZ 86301