

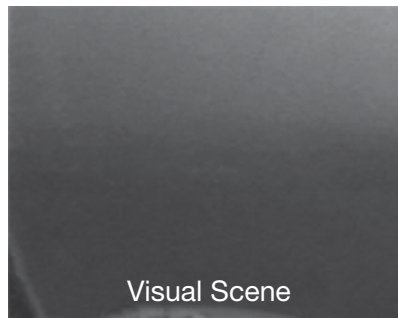


See More

SureSight Integrated Sensor Systems for Enhanced Flight Vision System Applications



SureSight Scene



Visual Scene

- Superior image quality - key to gaining operational credits at lower minima
- Improved image processing - optimized for performance in adverse weather conditions
- Packaged in a single, lightweight enclosure, with performance designed to meet your needs

SureSight

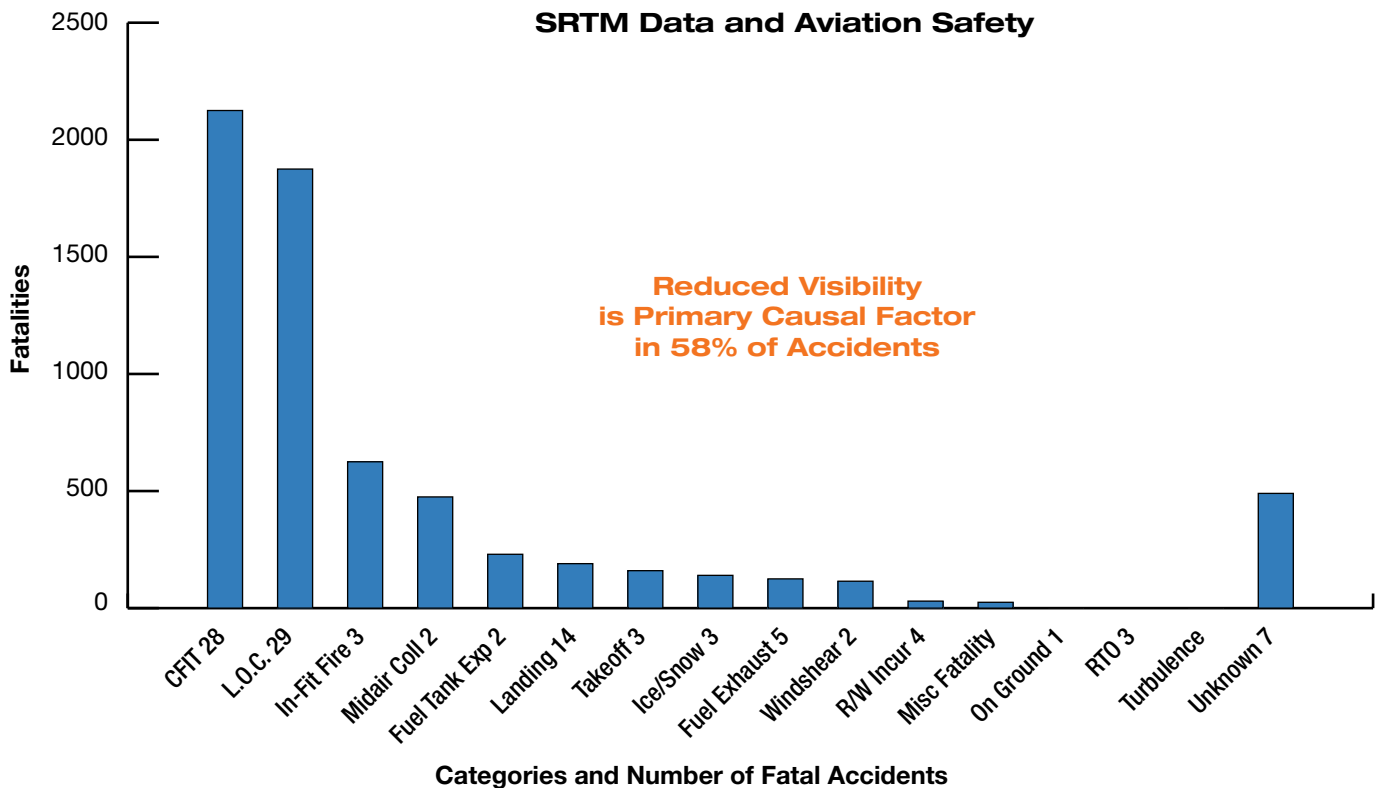
Reaching the Next Level of Performance in Adverse Visual Conditions

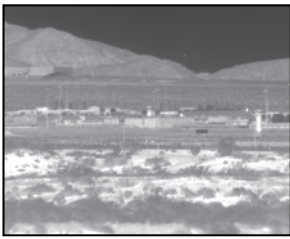


⁽¹⁾ Source: Flight Safety Digest, Flight Safety Foundation, May 2004

Loss of Situational Awareness — a Major Contributor to Business Jet Accidents

- 62.9% of business jet accidents attributed to loss of situational awareness⁽¹⁾
 - 41.4% of accidents occurred during approach and landing phase of flight
 - 48.1% of 27 CFIT (Controlled Flight Into Terrain) accidents cited loss of situational awareness as contributing factor
- 64.4% of ALA (Approach and Landing Accidents) involved lack of stabilized approach
 - 10% of accidents involved hard landings





CMA-2600 Scene

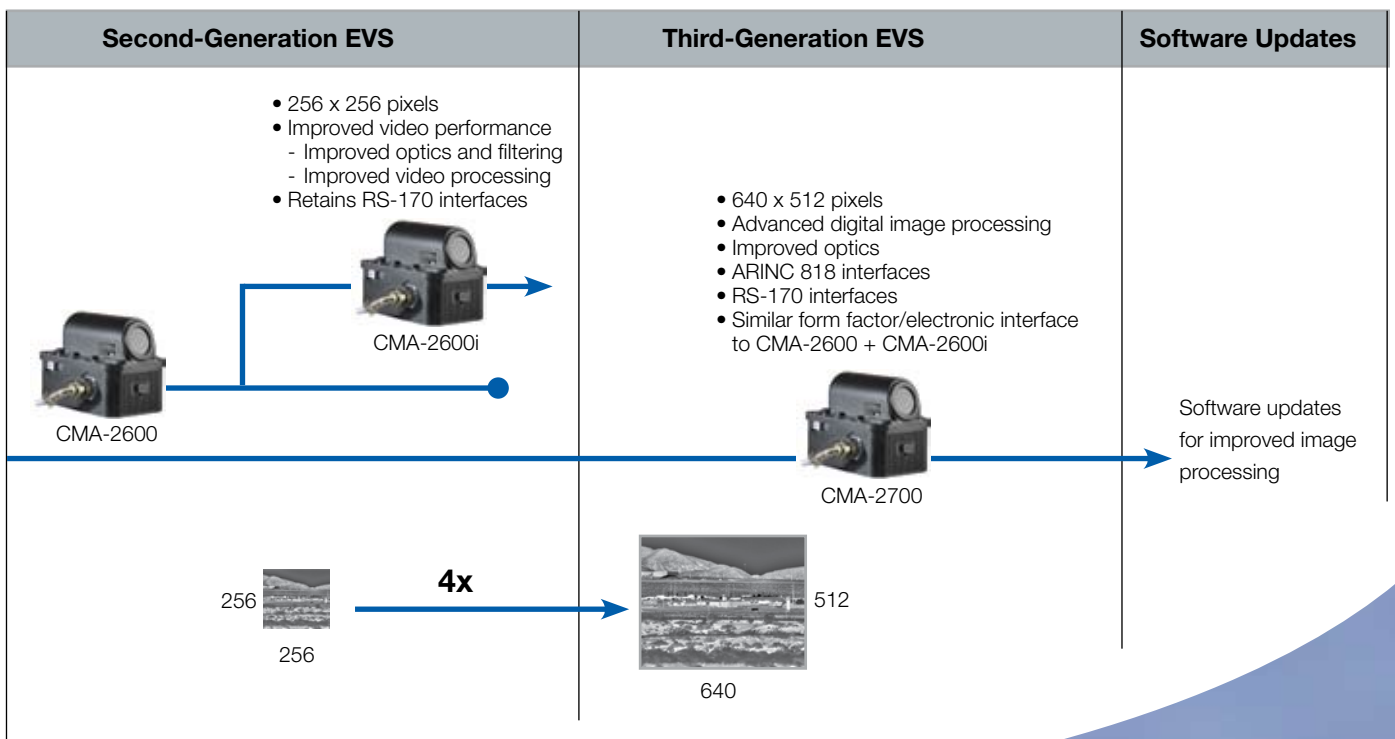


CMA-2700 Scene

I-Series™ — an Expanding Family of Integrated Sensor Systems

- I-Series fixed-form family includes the CMA-2600, CMA-2600i and the CMA-2700 Integrated Sensor Systems
- CMA-2700: third-generation system, builds on the success of the I-Series CMA-2600
 - The industry's highest resolution Focal Plane Array (FPA): 640 x 512 pixels
 - Advanced digital signal processing
 - Single, lightweight LRU to minimize impact on aircraft installation
 - Interfaces compatible with dual HUD installations
 - Compatible with the I-Series family of Integrated Sensor Systems for retrofit applications

Evolution of CMC's I-Series Sensors



Typical Nose Installations



SureSight I-Series Integrated Sensor System (ISS) for Enhanced Vision System applications

| | CMA-2600 | CMA-2600i | CMA-2700 |
|------------------------------------|---|---|--|
| APPLICATIONS | Business and air transport operators seeking additional operational credits through the use of an Enhanced Flight Vision System (EFVS). | Business and air transport operators seeking additional operational credits through the use of an Enhanced Flight Vision System (EFVS). | Business and air transport operators seeking additional operational credits through the use of an Enhanced Flight Vision System (EFVS). |
| WEIGHT | Less than 21 lb | Less than 21 lb | Less than 21 lb |
| FIELD OF VIEW | 30 degrees (nominal) | 30 degrees (nominal) | 30 degrees (nominal) |
| SENSOR TECHNOLOGY | <ul style="list-style-type: none"> • Cryogenically cooled Indium Antimonide (InSb) Focal Plane Array – sealed, Stirling cycle cooler – no maintenance required • 256 pixels x 256 pixels | <ul style="list-style-type: none"> • Cryogenically cooled Indium Antimonide (InSb) Focal Plane Array – sealed, Stirling cycle cooler – no maintenance required • 256 pixels x 256 pixels • Enhanced image processing within existing hardware • Improved optics and wave band filtering | <ul style="list-style-type: none"> • Cooled Indium Antimonide (InSb) Focal Plane Array – sealed, Stirling cycle cooler – no maintenance required • Highest resolution ISS for EFVS applications: 640 x 512 pixels • Next-generation image processing: advanced 14-bit digital processing • Improved optics and wave band filtering |
| DETECTED WAVELENGTHS | Dual-band <ul style="list-style-type: none"> • 1.2 – 2.5 microns shortwave infrared • 3.8 – 5.0 microns midwave infrared | Dual-band <ul style="list-style-type: none"> • 1.2 – 2.5 microns shortwave infrared • 3.8 – 5.0 microns midwave infrared | Dual-band <ul style="list-style-type: none"> • 1.2 – 2.5 microns shortwave infrared • 3.8 – 5.0 microns midwave infrared |
| CERTIFICATION STANDARDS | <ul style="list-style-type: none"> • Hardware: RTCA DO-160D • Software: RTCA DO-178B, DAL C • Firmware: RTCA DO-254, DAL C | <ul style="list-style-type: none"> • Hardware: RTCA DO-160D • Software: RTCA DO-178B, DAL C • Firmware: RTCA DO-254, DAL C | <ul style="list-style-type: none"> • Hardware: RTCA DO-160F • Software: RTCA DO-178B, DAL B • Firmware: RTCA DO-254, DAL B |
| TEMPERATURE (Continuous) | -55° C to + 50° C | -55° C to + 50° C | -55° C to + 50° C |
| INPUT POWER | 28 Volts DC – 70 watts (nominal) | 28 Volts DC – 70 watts (nominal) | 28 Volts DC – 70 watts (nominal) |
| INSTALLATION CONFIGURATIONS | <ul style="list-style-type: none"> • Sensor may be installed upright or inverted with image inversion selectable on installation. | <ul style="list-style-type: none"> • Sensor may be installed upright or inverted with image inversion selectable on installation • Same mechanical and electrical interfaces as the CMA-2600 | <ul style="list-style-type: none"> • Sensor may be installed upright or inverted with image inversion selectable on installation • Mechanical and electrical compatibility with the family of I-Series ISS – ideal for retrofit of existing CMC SureSight I-Series ISS |
| SENSOR CONTROL INPUTS | ARINC 429 and discrete signals for installation flexibility <ul style="list-style-type: none"> • Display configuration • Sensor orientation • Sensor on/off/standby • Non uniformity calibration (NUC) • Temperature range select • A/C window temperature • Factory test port | ARINC 429 and discrete signals for installation flexibility <ul style="list-style-type: none"> • Display configuration • Sensor orientation • Sensor on/off/standby • Non uniformity calibration (NUC) • Temperature range select • A/C window temperature • Factory test port | ARINC 429 and discrete signals for installation flexibility <ul style="list-style-type: none"> • Display configuration • Sensor orientation • Sensor on/off/standby • Non uniformity calibration (NUC) • Temperature range select • A/C window temperature • Supports EFVS with dual Head-Up Display installations • Factory test port |
| SENSOR OUTPUTS | <ul style="list-style-type: none"> • 2 – ANSI/SMPTE 170M (formerly RS-170 - monochrome NTSC) • Sensor status (via ARINC 429) • Aircraft IR window heater control (when desired) • Factory test port | <ul style="list-style-type: none"> • 2 – ANSI/SMPTE 170M (formerly RS-170 - monochrome NTSC) • Sensor status (via ARINC 429) • Aircraft IR window heater control (when desired) • Factory test port | <ul style="list-style-type: none"> • Two (2) ARINC 818 Digital Interfaces • Two (2) ANSI/SMPTE 170M (formerly RS-170 monochrome NTSC) • Supports EFVS with dual Head-Up Display installations • Sensor status (via ARINC 429) • Aircraft IR window heater control (when desired) • Factory test port |
| BUILT IN TEST (BIT) | Power up testing Continuous background testing On request testing | Power up testing Continuous background testing On request testing | Power up testing Continuous background testing On request testing |

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 Over 100 Years
 of Innovation

References to the various certification levels refer to planned certification. Please contact us for actual certified levels and schedules. For information purposes only. To accommodate product improvements, specifications are subject to change without notice.
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