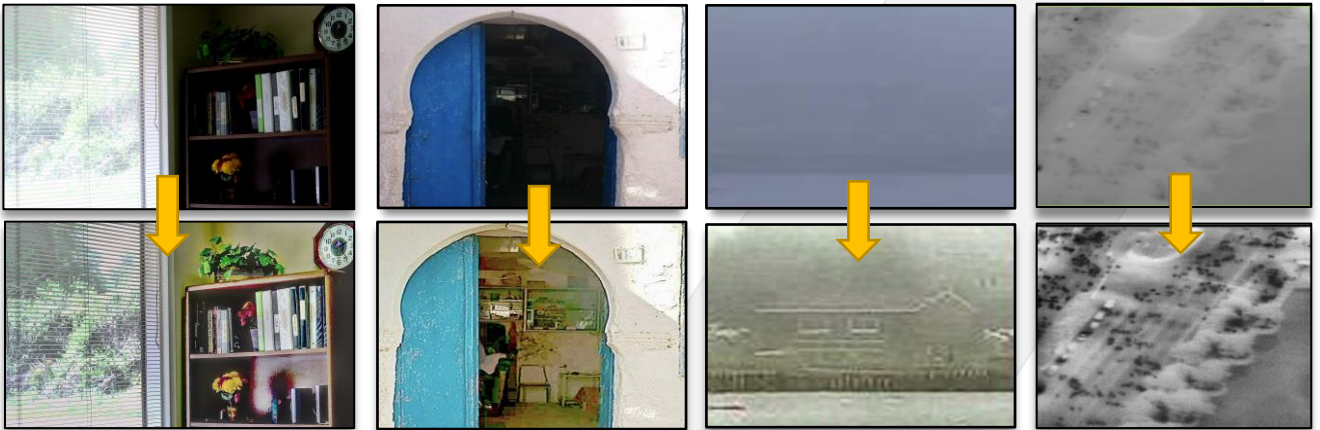


Crystal takes a live EO/IR video stream as input and outputs in real-time, **with no user input or adjustment**, an enhanced video stream for viewing, further analytics processing, transmitting or storing.



Poor Contrast Visible

Fog/Haze

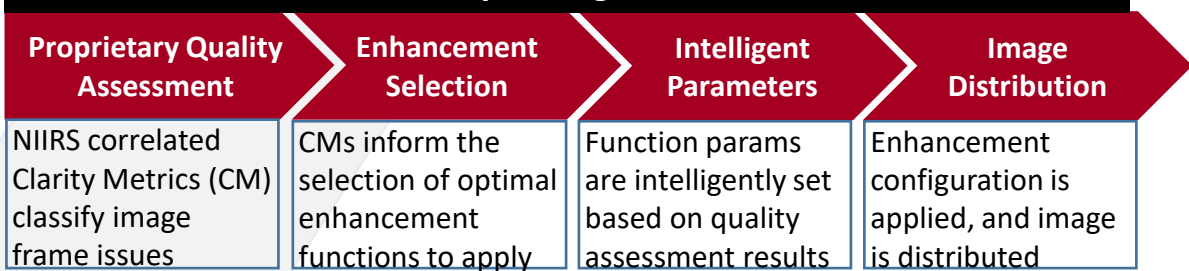
Low Contrast IR

Product Capabilities

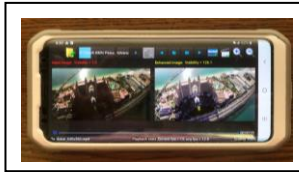
Core Enhancement Features: Adaptive Brightness Balance, Adaptive Contrast Correction, Adaptive Sharpness Improvement, Adaptive Fog, Haze, Dust, and Pollution Mitigation, Adaptive Sensor Gain Correction, and Super-Resolution



Real Time Sub-Frame Latency Intelligent Video Enhancement Device



Product Configurations



Software Solution
Android

OR



Software Solution
Windows/Linux

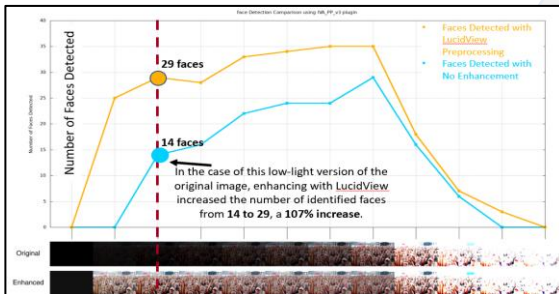
OR



Military Grade Portable
Edge Processor with
Video I/O

Additional Features

- Improved accuracy of video analytics routines such as object detection, facial recognition, and license plate reading
- Visibility Re-establishment in Low Light/Shadows Zones
- Adaptive Color Correction
- Adaptive Brightness Balance
- Adaptive Sensor Gain Correction
- Adaptive Contrast and Sharpness Improvement
- Poor Weather Mitigation: Fog, Haze, Dust, and Pollution
- Intelligent Clarity Metric Guided Enhancement



Specifications

Crystal's current configuration is appropriate for many air, ground and sea operations. Phelps2020 can also provide **custom configurations** to meet client specific technical requirements.

| | | |
|---------------|--------------------------------------|----------------------------------|
| Size & Weight | Current Dimensions (enclosure) | 3 to 60 in ³ |
| | Current Weight (enclosure and board) | From 2 oz to 2 lbs |
| | NGB Board only (Dim & Weight) | 2x3x0.5 in & 2 oz |
| Power | Power Supply | 9-36VDC |
| | Power Consumption | Max. 12 Watt |
| Video | Connectors | HD-SDI and Ethernet (mil-spec) |
| | Resolutions | Up to 1080P (60 FPS) |
| Speed/Latency | | Real-time with Sub-frame Latency |
| Environmental | Operating/Storage Temp | Approx. -20C to 50C |