The Velocity™ EBSD Camera Series offers high-speed EBSD mapping with the best indexing performance on real world materials. Powered by a CMOS sensor, the Velocity™ combines fast acquisition with high sensitivity and low noise performance for optimal collection and data quality.

The Velocity™ Camera Series offers two different models:
- **Velocity™ Plus** - up to 3,000 indexed points per second
- **Velocity™ Super** - up to 4,500 indexed points per second

For both models, these speeds can be achieved while providing indexing success rates up to 99% or better. At these speeds, the Velocity™ cameras utilize 120 x 120 pixel images for improved band detection. This image resolution, combined with EDAX’s proven triplet indexing routine, provides orientation precision values of less than 0.1° without needing any specialized processing routines for accurate characterization of deformed microstructures.

The performance of the Velocity™ camera extends to a wide range of materials, including lower symmetry, multi-phase and deformed structures. The Velocity™ Series enables efficient data collection on these real-world samples with the quality results needed for optimal materials analysis.

The Velocity™ EBSD cameras can be integrated with compatible EDAX EDS detectors for efficient simultaneous EDS-EBSD collection, even at the highest collection speeds. When combined with Chi-Scan™ analysis, this results in useful integrated data for accurate phase differentiation.
Features and Benefits

Data collection rates up to 3,000 or 4,500 indexed points per second
- EBSD maps can be collected in minutes for efficient SEM use, in-situ experiments, and 3D EBSD applications

High-speed, low-noise CMOS sensor
- Sensor provides high sensitivity and low noise, and 120 x 120 pixel images for EBSD indexing at highest speeds

Orientation precision less than 0.1˚
- Clear characterization of deformed microstructures with standard indexing routines

Highest indexing success rates
- EDAX’s proven triplet indexing and patented Confidence Index provide unparalleled indexing performance on challenging real-world samples

High-speed simultaneous EDS-EBSD collection
- The Velocity™ EBSD cameras have been optimized with compatible EDAX EDS detectors for efficient data collection at the highest speeds

Conclusion
The Velocity™ EBSD Camera Series provides the high-speed EBSD mapping capability combined with the accurate indexing needed to resolve crystallographic microstructures and help solve materials characterization challenges quickly and easily.

Specifications
- Data collection rates: **Velocity™ Plus** up to 3,000 indexed points per second
- **Velocity™ Super** up to 4,500 indexed points per second
- Low noise CMOS sensor
- Orientation precision less than 0.1˚ without special correction routines
- 640 (H) x 480 (W) image size
- 120 x 120 image resolution at maximum indexing speeds
- 12-bit imaging
- Phosphor screen optimized for high speed/high sensitivity collection
- Custom lens for optimal performance
- Operation down to 5 kV acceleration voltage
- Compatible with NPAR™ and OIM Analysis™
- Compatible with HR-EBSD
- Motorized slide with metal bellows vacuum protection
- PRIAS™ and Forward Scatter Detector included

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