

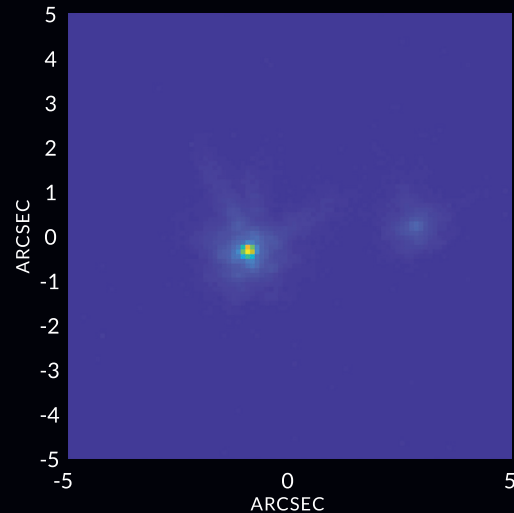
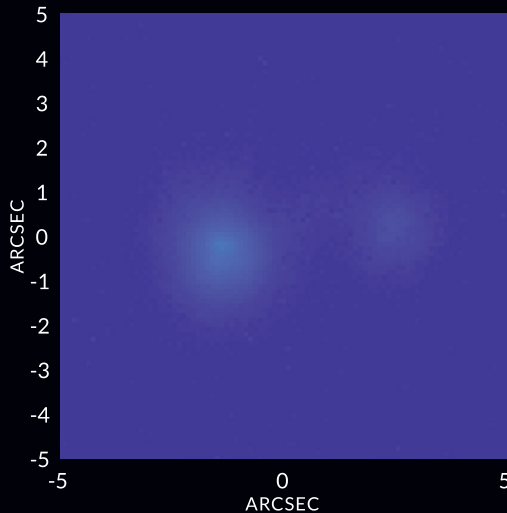


INTRODUCING THE WORLD'S FIRST COMMERCIAL, PRE-INTEGRATED **ADAPTIVE OPTICS SOLUTION**

HIGH-RESOLUTION IMAGING

HIGH-RESOLUTION SPECTROSCOPY

LASER COMMUNICATION



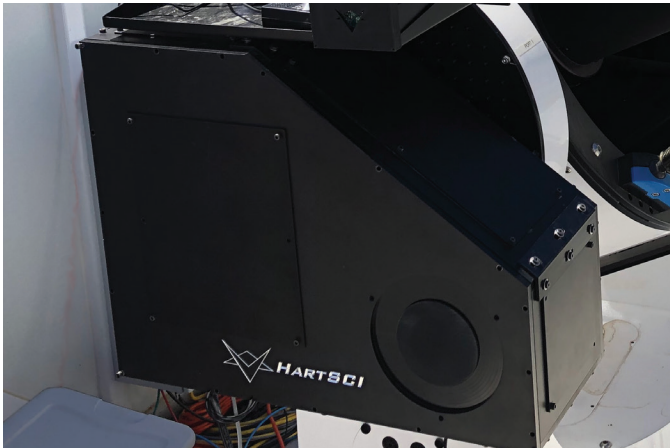
PlaneWave Instruments and Hart Scientific Consulting International (HartSCI) have partnered to offer the world's first commercial, pre-integrated adaptive optics solution to support advanced astronomy applications faster, better, and easier than ever before.

Customers will be able to select HartSCI's adaptive optics (AO) as an accessory to PlaneWave's RC700, CDK700, and PW1000 telescopes beginning in the fourth quarter of 2022. Products will be delivered and installed at the same time as the telescope and will save customers significant time, money, and effort.

This partnership is creating an easier, faster, and less expensive way to access adaptive optics than ever before – undoubtedly leading to new discoveries in astronomy.

LAUNCHING A NEW GENERATION OF DISCOVERY

NEVER BEFORE SEEN PRICING, AVAILABILITY, AND EASE OF USE.



BENEFITS

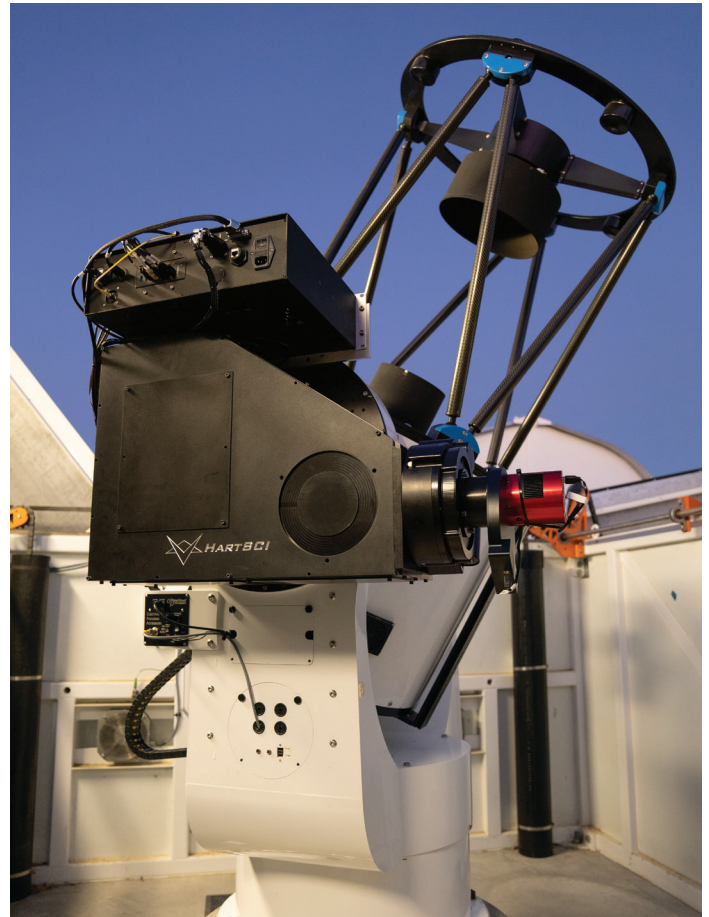
- Breaks historical high-cost paradigm for high-order AO
- Dollar for dollar the highest resolution and contrast for imaging and spectroscopy for meter-class telescopes
- Eyes on sky within hours of delivery

FEATURES

- Correction to the diffraction limit in 750 – 1000 nm waveband
- Mates natively to PlaneWave CDK700, RC700, and PW1000 telescopes
- Supports PlaneWave IRF90 instrument rotator/focuser
- Customizable interface to other PlaneWave Instruments telescopes available
- Diffraction-limited output beam delivers Nyquist-sampled images with common cameras
- Built-in scoring/acquisition camera and calibration source
- Customizable wavelength split between science and wavefront sensor channels
- Automated target acquisition on wavefront sensor
- Automated tracking error offload to telescope mount
- Fiber coupling unit available (Q3 2022)

SOFTWARE

- Full-featured browser-based graphical user interface runs on any remote computer
- Simple HTTP-based API offers full automation and seamless integration into observatory control systems (Q4 2022)
- Built-in automated calibration functions
- User-selectable recording of multiple full-speed telemetry streams to common HDF5 file format



SPECIFICATIONS

Correction speed	Up to 1000 updates per second
Wavefront sensor	8x8 Shack-Hartmann
Actuator count	45
Full-stroke tip-tilt control	± 2 arcmin
Output focal ratio	f/12
External connectivity	Ethernet
Telescope mounting	Nasmyth port
Power draw	80 W
Weight	40 kg



PLANEWAVE.COM | (310) 639-1662
MDIETERICH@PLANEWAVE.COM



HARTSCI.COM | (520) 314-8544
CUSTOMERSERVICE@HARTSCI.COM

