

Hot Products 2018



1 STARGATE DOBS Sky-Watcher skywatcherusa.com

For deep-sky observers there's nothing like a large-aperture telescope to make chasing faint fuzzies a rewarding experience. These new 18- and 20-inch f/4 Dobsonians from Sky-Watcher offer a host of standard features, such as light-weight mirrors that acclimate quickly to changing temperatures, and optional motor drives with Go To pointing, at a cost significantly lower than comparable scopes. Watch for our review of the 18-inch Go To model in the coming months.

• U.S. price: from \$5,999

Each year, S&T editors scour the marketplace searching for what we consider to be the year's most exciting new products. To make our list, a product should introduce new (or improve upon existing) technologies, provide a solution to an old problem, or simply deliver exceptional value. Our Hot Products list for 2018 includes a variety of gadgets ranging from mounts, cameras, and accessories aimed at the growing popularity of robotic astronomy to items big and small for observers who love being out under a starry sky. As is often the case, this year some products caught our eye because of their exceptional value — equipment that offers features and performance at a cost well below that of similar items in the past. We hope you enjoy reading about these innovative products that piqued our interest.

2 TWIST-LOCK STAR DIAGONALS

Orion Telescopes & Binoculars oriontelescopes.com

A quick twist of the red ring tightly locks eyepieces and camera adapters into these 90° mirror star diagonals with dielectric coatings that provide 99% reflectivity. Models are available in 1¼- and 2-inch sizes. The nosepiece of each is threaded for filters and has machined baffles to reduce light scatter. Both are made of anodized aluminum, and the 2-inch model includes a 1¼-adapter with the same twist-lock feature.

• U.S. price: \$119.99 and \$189.99, respectively

3 MULTI-PURPOSE LANTERN

Orion Telescopes & Binoculars oriontelescopes.com

Any observer will tell you that having a good light handy when you're out stargazing is worth its weight in gold. The Orion DualBeam Astro Lantern is a waterproof, multi-purpose, LED unit built around a rechargeable 2,600 mAh lithium battery. You can cycle through four brightness levels of red light and two of white, and the light can be turned off from any setting without cycling through the others. Magnetic clips, a carabiner, and a wrist strap are included, and the little lantern packs enough juice (and USB port) to boost the battery life of most mobile devices.

• U.S. price: \$24.99

4 PREMIUM 6-INCH REFRACTOR

Stellarvue stellarvue.com

If you're in the market for an American-made, premium APO refractor, the competition is pretty thin for apertures greater than about 5 inches. The new Stellarvue SV152T stands out as the only scope offering at least 6 inches of aperture for less than \$10 grand (and thousands of dollars less than the nearest competitor). The scope's 3-element f/8 objective is made with ED glass, and an optional field flattener is available as well as an optional focal reducer. Standard features include a 3.5-inch Feather Touch focuser, machined tube rings, Losmandy-style dovetail bar, and rugged transport case.

• U.S. price: \$8,995



5 IMPROVED SOLAR VIEWING

Meade meade.com

Four new SolarMax III telescopes are the latest generation of Meade's Coronado line of dedicated hydrogen-alpha solar scopes. Each comprises a 70-mm f/5 refractor with a 2-inch dual-speed rack-and-pinion focuser and a 90° diagonal with a built-in blocking filter. The models with a 0.7-angstrom bandpass have a single tunable 60-mm hydrogen-alpha filter mounted in front of the objective, while the 0.5-angstrom models have a double-stacked filter set. Remove the objective filter and substitute a standard diagonal, and you have a 70-mm scope for nighttime observing.

• U.S. price: from \$2,299

6 STAR ADVENTURER MINI

Sky-Watcher skywatcherusa.com

The Star Adventurer Mini, or SAM for short, stands out from the increasingly crowded market of small camera trackers made for astronomy by adding a slew of new capabilities to a very modestly priced model. Among them are the ability to track the sky for long exposures as well as offer motion control and panning for time-lapse sequences. You can get all the details in Alan Dyer's in-depth product review in the December 2017 issue, page 58.

• U.S. price: \$299

7 PIXINSIGHT GUIDE

Springer International Publishing springer.com

Those awe-inspiring astrophotos splashed across magazine pages and the Internet owe much of their beauty to advanced image-processing techniques. Warren Keller's guide to *PixInsight* — one of today's most popular astronomical image-processing programs — provides detailed information on how to transform the raw data from your camera into gallery-worthy images. There's a good reason this book has become a best-seller in its category.

• U.S. price: \$34.99 (softcover), \$24.99 (ebook)

8 OPEN-SOURCE GO TO CONTROLLER

Explore Scientific explorestars.com

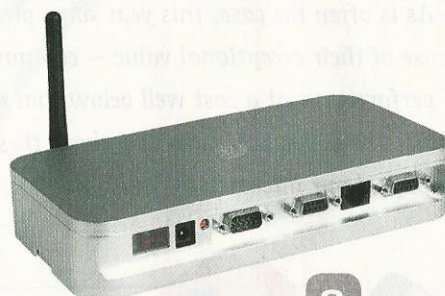
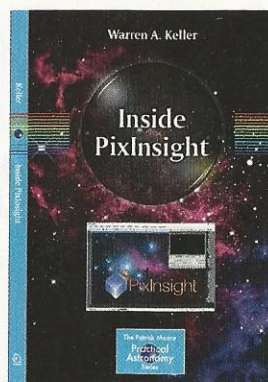
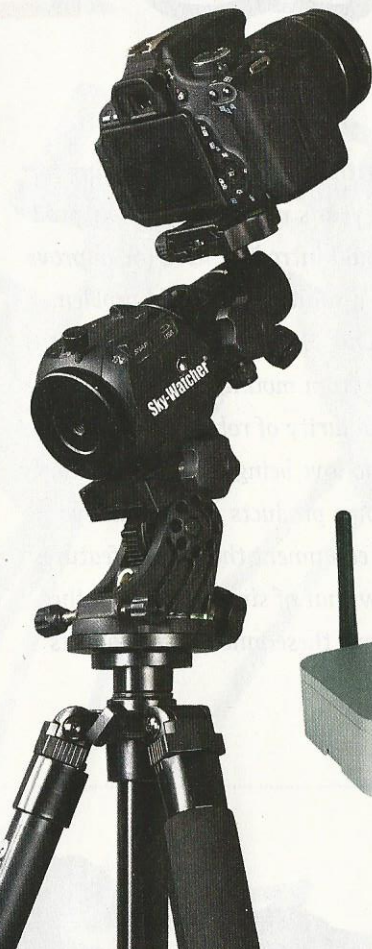
Go To pointing has become virtually standard fare on any motorized telescope. But what makes the PMC-Eight System for select Explore Scientific and Losmandy equatorial mounts special is its ease of adapting to other mounts and, most notably, its open-source architecture complete with a programmer's reference and software-development kit. This, according to the company, allows programmers to create custom Go To software to suit the needs of observers and researchers. Not a programmer? Don't worry, the system and its free app currently offer wireless control of mounts with Windows computers and mobile devices.

• U.S. price: \$1,499

9 S&T'S CELESTIAL GLOBES

Sky & Telescope shopatsky.com

Think we'd have a year without a Hot Product pick of our own? Fear not. The popularity of our growing family of 12-



inch planet and celestial globes has spawned a series of 6-inch semi-gloss-finished orbs for Earth, Moon, Mars, and Pluto. As with their bigger counterparts, each is based on detailed spacecraft imagery and has prominent features labeled. And the Earth globe emphasizes our home world as a planet without geopolitical boundaries. Each includes a plastic stand and information card.

• U.S. price: \$24.99 each

10 FINISHED CELLULAR MIRRORS

Dream Cellular dreamcellular.com

Dream Telescopes and its sister company Dream Cellular have been perfecting lightweight-mirror technology for more than a decade. And its cellular mirror blanks were named one of our Hot Products for 2010. Now the company is offering finished lightweight mirrors from as small as 25-mm diameter up to apertures greater than a meter. It can also fabricate custom carbon-fiber mirror mounts that thermally match the optics.

• U.S. price: projects quoted individually

11 COMPACT REFRACTOR

Astro-Tech astronomics.com

We know of countless life-long amateur astronomers who got started sweeping the heavens with 60-mm refractors, so there's no denying that these scopes can deliver a satisfying observing experience. And lately the market has seen an increasing number of compact APO models. But the Astro-Tech AT60ED 60-mm f/6 with its 2-inch, dual-speed focuser offers the biggest bang for the buck that we're aware of. Coupled with an optional field flattener, it doubles as a powerful, wide-field imaging scope.

• U.S. price: \$369

12 PINT-SIZE PRECISION

Starlight Instruments starlightinstruments.com

With all of today's emphasis on 2-inch and larger focusers, it's nice to see that the legendary features, quality, and precision of Feather Touch focusers are now available with two 1¼-inch models, one offering a single-speed drive, the other 10:1 dual-speed. Both have ¾ inch of travel, an 8-pound load capacity, a travel brake, and a drawtube with male T-threads for easy attachment of cameras and accessories.

• U.S. price: from \$249

13 ALTAZIMUTH PARAMOUNTS

Software Bisque bisque.com

Software Bisque, the world's foremost manufacturer of equatorial telescope mounts for remote/robotic astronomy, has announced its first foray into building altazimuth mounts (and modifying its storied *TheSkyX* software to control them). While every mount design has pros and cons, advantages for altazimuth mounts include simplified mechanical design of telescopes and fitting large-aperture instruments into a compact area of operation (think smaller domes). The new mounts include models with traditional drive gears as well as ones with direct-drive motors.

• U.S. price: from \$30,000