

Rokinon/Samyang AF 24mm F/2.8 FE for Sony

By Phil Rudin

Since 1979 Samyang Optical Company LTD, a Korean based company has continued to push the boundaries for innovation and craftsmanship in the camera lens industry. Rokinon is owned and operated by Elite Brands Inc. which is the sole provider of Rokinon, Xeen by Rokinon and Samyang branded products in North America, Central America and South America. Samyang/Rokinon lenses and accessories are distributed in over fifty countries world wide. Samyang has focused on manual focus fixed focal length camera lenses and the XEEN Cinema lens line for years.

This review will be the second in a series of lens reviews using third party “budget” lenses for high resolution cameras. The lenses I will be testing cost anywhere from one-half to one-third the price of the camera manufactures proprietary lenses.

As with the lens, excellent deals can also be found on current full frame, APS-C and M43 camera bodies discounted in advance of newly released updates. The Sony A7R III released just over three years ago is now, discounted \$700.00 to \$2500.00 from original \$3200.00 retail price when first released. These reductions make many full frame mirrorless cameras very competitive with new APS-C and even M43 cameras.

Underwater housings and accessories in both the new and used market are also very competitive and often cheaper than those for full frame and APS-C DSLR cameras.

My first experience with a Rokinon lens was for a review of the Sony A7R II and Ikelite housing

I did for the May/June 2016 issue #90 of uwpmag.com. I was using the Rokinon 12mm F/2.8 ED AS IF NCS Fisheye for Sony full frame cameras with an Ikelite focus gear using the Ikelite eight inch dome port. This is an all manual control lens I shot with both front and rear curtain shutter pre-setting the aperture in the F/8 to F/16 range. The aperture setting needed to be preset prior to entering the water because I had no aperture control once the housing was closed.

To achieve proper exposures I was using ISO values from 50 to 320 and shutter speeds from 1/15th sec to 1/250th sec. The 180 degree fisheye angle of view produced excellent sharpness with the Sony A7R II's 42.4MP CMOS sensor, with great color rendering and the build quality was excellent for such an inexpensive lens. The only real downside to the fisheye lens was the plasticky feel, lack of quality weather-sealing and connectivity for EXIF data attached to the images in post.

Fast forward from 1979 to May 2016 and Samyang's announcement of their first ever auto focus lenses exclusively for Sony full frame mirrorless cameras. The first offerings were the Samyang 50mm F/1.4 AS IF UMC and the 14mm F/2.8 ED AS IF UMC. Unlike the 12mm fisheye I tested in 2016 the 50mm F/1.4 and 14mm F/2.8 are designed for the flange distance of the Sony FE mount full frame mirrorless cameras.

The 12mm fisheye is a manual DSLR lens with an extension added to the rear of the lens replicating the distance from the rear of the lens to the sensor if



a mirror box was included in the mirrorless camera body. My Rokinon AF 14mm F/2.8 for Sony review is in back issue #UWP-112.

The Rokinon 24mm F/2.8 Lens

Before I jump into the body of this review I should first explain why I think a 24mm equivalent lens with only a 82 degree angle of view should be in your underwater kit regardless of the sensor size of your camera.

For years I used the Olympus 12mm F/2 (24mm equiv.) as my go to lens for shooting intimate people portraits both underwater and for splits. These close focusing lenses result in far less distortion, sharper corners, excellent blurred backgrounds, smaller port sizes and more. You will see in the attached images that for vertical compositions of smaller to mid-size subjects the 24mm excels at reducing unwanted distractions like divers swimming through your frame.

The other reason I love these lenses is the size and weight and value for topside travel

photography and dive boat photos. I carry the Rokinon AF 24mm and the Rokinon AF 75mm F/1.8 FE as my prime travel lenses. They take up less space and weight less than an FE 24-70 F/2.8 or Tokina 28-75mm F/2.8.

I generally shoot my travel images with the lowest MP FF camera I travel with usually in the 24MP range and the image quality for both lenses is excellent.

The Rokinon 24mm F/2.8 AF lens tested for this review is a wide angle prime lens with an 82 degree rectilinear angle of view on full frame and a 36mm equivalent with Sony APS-C. The Rokinon AF 24mm is what Full frame mirrorless users would wish for in a lens, it is compact at just 61.8 X 37 mm (2.43 X 1.46”) and weights in at only 120g (4.23 oz.).

The lens has 7 Elements in 7 Groups with three aspherical elements and two high refraction index elements to help control spherical aberration and distortion, increase image sharpness and boost resolution and clarity. A multi-coating has also been applied to several of the elements to aid in the reduction of ghosting and flare.

The lens accepts 49mm filters and ships with a very small bayonet lens hood, lens caps and a zipper travel pouch. The diameter of the lens allows it to be mounted from the rear of any Sony A7 series housing with any port size opening.

The 24mm minimum focus distance

is 24 cm (9.45”) with a 0.13x max magnification. The aperture range is from F/2.8 to F/22 with seven diaphragm blades.

Currently the Rokinon AF 24mm F/2.8 for Sony is priced at \$249.00 US down from its introductory price of \$399.00. Other 24mm lenses for Sony FE/E mount include the excellent Sony FE 24mm F/1.4 GM lens which retails for \$1398.00, the Sigma 24mm F/1.4 \$849.00 and the Tamron 24mm F/2.8 on sale for \$299.00. These are all larger and heavier lenses but I would include the Tamron in the budget class.

The Rokinon AF 24mm F/2.8 is a no frills lens that offers no in-lens image stabilization, no advanced weather-sealing and no AF-Manual focus on/off switch or focus hold button on the lens barrel, it is however internal focus.

For underwater photography with the A7R III/IV I use the lens in AF-C auto focus mode. You can switch the Sony A7-series cameras to manual focus in the super menu very quickly but since no focus gear is available for the housings I tested with the lens, this is a moot point.

For land photography the lens has a smooth manual focus ring which works

Model, Cozumel, Mexico, Olympus EM-1, Olympus 12mm F/2 (24mm equiv.) 170mm Zen dome port, Nauticam NA-EM1 housing, A/V light, ISO-200, F/5.0, 1/2500th sec



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very well for things like astro photography. I have manual focus set so that as soon as I turn the focus ring the area around the focus box is magnified about ten times in the viewfinder.

Once I achieve critical focus and half press the shutter the image in the viewfinder returned to the full frame view. I also have focus peeking set to red which also assists with achieving critical focus. This lens is quite robust but still has a bit of a plasticky feel. Mounted on the camera the lens seems smaller and lighter than any full frame lens I have used to date.

Be aware that Rokinin bundles a “lens station for Sony E” with several of the for Sony FE full frame auto focus lenses they sell including the 24mm. The lens station has the Sony E mount and is used to update firmware for the Rokinin AF lenses.

You first download the lens station software for Windows or Mac then chose the AF lens firmware you want to update using the provided mini USB cord. Updates can be made to the auto focus Sony FE 24mm F/2.8 using the lens station.

So far I have found firmware updates for seven of the nine Rokinin auto focus lenses for Sony full frame cameras. I have tested four of Rokinin’s Sony AF lenses and they all arrived factory new needing the firmware updates. This is a good thing for photographers because it allows new camera bodies to be added and lens quality can continually be tweaked for better results.

The Rokinin lens station for Sony E sells for around \$60.00, when bundled with a lens the cost remains about the same. Rokinin AF full frame lenses are also coming for both Canon and Nikon FF mirrorless cameras with the AF 14mm F/2.8 for Canon already hitting the market and also needing a firmware update.



Granulated Sea Star, Puerto Galera, Philippines, Sony A7R III, Rokinin 24mm F/2.8, Nauticam NA-A7RIII housing, Zen 230mm dome port, Two Inon Z330 flashes, ISO-320, F/22, 1/30th sec.

Soft Coral, Puerto Galera, Philippines, Sony A7R III, Rokinin 24mm F/2.8, Nauticam NA-A7RIII housing, Zen 230mm dome port, Two Inon Z330 flashes, ISO-320, F/18, 1/30th sec

Currently the Rokinin AF 24mm F/2.8 and AF 14mm F/2.8 are not included on the Sony A7-series or A9-series port charts for Aquatica, Ikelite, Isotta, Meikon/Sea Frogs, Nauticam, Sea & Sea or Subal housings. As a result I was on my own to come up with a dome port and extension combination to support the Rokinin lenses.

For the Aquatica A7rIV Pro housing I used the Aquatica 200mm (eight inch) acrylic dome port and the 28.5mm port extension for the 14mm F/2.8. For



even better corner sharpness I would recommend the Aquatica 230mm (9.25 inch) optical glass dome port.

For the Nauticam housings for A9, A7 & A7R II, III & IV with an N100 to N120 35.5mm port adapter I selected the Zen Underwater 230 mm optical glass dome port and a 20 mm port extension for the 14mm and no extension for the 24mm. Because of the small size of the lens I don’t think a port extension will be needed for the 24mm with

ports in the 170mm to 230mm range. Further the smaller Zen 170mm and Nauticam 180mm ports or like options should work very well for most situations.

Since the purpose of this review is to offer less expensive options that offer excellent high resolution image quality I would also suggest that many acrylic dome ports should also work well with the proper or no port extension. Acrylic dome ports are about one-third to one half the cost of optical glass ports or chose what you already own first if it supports the lens.

With the larger acrylic ports the dome has a tendency to turn port up putting extra strain on the right wrist while the optical glass ports are much heavier but still have a large air pocket. Weights can be added to the dome shade for acrylic ports to help offset the added port buoyancy. I prefer the optical glass ports for split images because they appear to shed water better and I see less ghosting and reflection in the images.

Field testing the Rokinin 24mm F/2.8

I tested the Rokinin 24mm lens with the Sony A7R III camera and Nauticam NA-A7RIII housing with the ZEN Underwater DP-230mm Fisheye II port (the only dome port I

own) with no extension and two Inon Z-330 flashes using manual power settings.

The A7R III camera was setup using AF-C and Lock-on AF Expand Flexible Spot, with ISO sensitivity ranging from 100 to 640 and aperture settings from F/2.8 to F/18.

I first tested the lens in a swimming pool to see if my port selection was in a range where I would have sharp corners without vignetting. The 5.5 stops of image stabilization in camera allowed me to shoot at shutter speeds as slow as 1/15th of a second while maintaining excellent sharpness in the image with static subjects, anything much slower than 1/15th sec. is not very useful for most underwater work. As you will see from the images I have provided I found myself using the lens in the Portrait orientation much more often than in landscape. In portrait using two flashes you need to reposition the lower or in some cases both flashes to avoid blowing out the bottom half of the image by having the flash to close to the bottom.

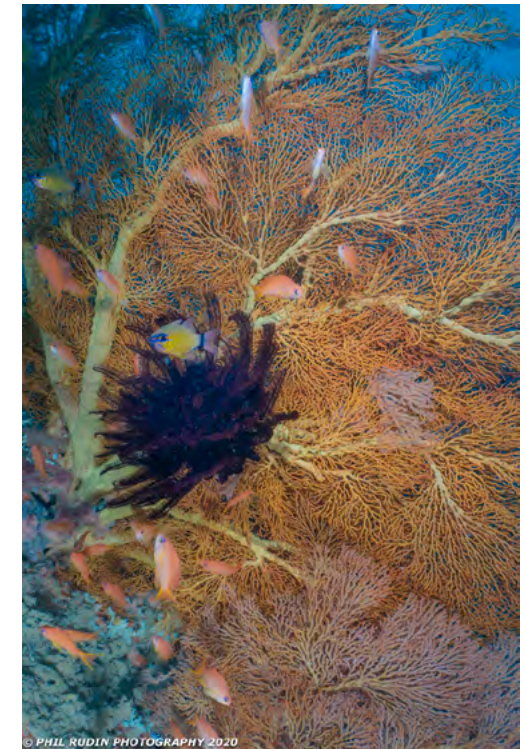
Most of the included images were shot around Puerto Galera Mindoro in the Philippines. I was able to lock focus with a half press and drag the focus point around the frame for best composition without dropping the focus point. For humans the eye auto focus locked on even with divers



Clarks Anemone fish, Puerto Galera, Philippines, Sony A7R III, Rokinin 24mm F/2.8, Nauticam NA-A7RIII housing, Zen 230mm dome port, Two Inon Z330 flashes, ISO-320, F/22, 1/60th sec

wearing a black mask.

With all wide lenses strobe placement is critical to avoid backscatter and like all wide lenses looking into the corners of the EVF or LCD while composing the image is very important. With a minimum focus distance of 24 cm the lens focuses all the way to the port glass



Anthias and Ring-Tailed Cardinalfish around hard Coral, Puerto Galera, Philippines, Sony A7R III, Rokinin 24mm F/2.8, Nauticam NA-A7RIII housing, Zen 230mm dome port, Two Inon Z330 flashes, ISO-320, F/22, 1/30th sec

with the 230mm dome but the larger port interferes with your ability to shoot CFWA without banging the dome shade on something.

Even with the Tamron 24mm which focuses to 1:2 at 11.94 cm (4.7 inches) from the sensor shooting behind even a 170mm port would put the minimum focus point inside the

port negating most of its advantage as a close focusing lens.

At the higher F/numbers (11-16) I found corner sharpness with the Zen Port 230mm optical glass port to be acceptable for publication. I would expect similar results with ports down to 170mm. Because the 24mm is not a super wide lens like lenses in the 12 to 18mm range corner sharpness is not as problematic all else being equal.

The Rokinon 24mm is a niche lens for me, my go to underwater W/A lenses on any dive trip remain the Sony FE 12-24mm with the Zen 230 dome port and the Nauticam WACP. I also use the Canon 8-15 fisheye but I don't rely on the fisheye nearly as much as many U/W photographers.

I had to rethink and reconfigure my travel kit to accommodate the additional weight and size of the Zen 230mm optical glass dome port and the Nauticam WACP wet lens. I always travel with one or the other but both would be over the top for me. If my destination offers great split image opportunities I favor the dome port configuration. If I will be shooting at depth I favor the WACP and I carry the fisheye and a 140mm port to shoot splits in a pinch.

I carry both options the same way packed in bubble wrap standing upright in my ThinkTank Urban Disguise 60V2.0 shoulder bag rather than trying to fit them into

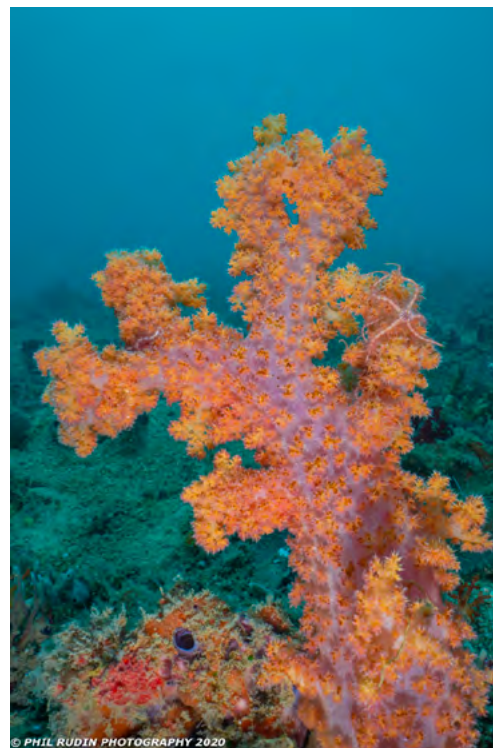
my ThinkTank Roller bag. With this configuration I still have room for several lenses and a body or two along with the port or WACP added to my shoulder bag. This configuration is frequently over the airline weight restrictions a kilo or two which is a risk I am willing to accept since my shoulder bag is weighed far less often at the airport than my roller bag.

When the image files from the Rokinon lens are downloaded into LightRoom all of the EFIX data appears and lens profiles are accessible. In the LightRoom library the meta data always lists the lens as a Samyang 24mm while in the development module the lens profile appears as a Rokinon/Samyang 24mm.

The Rokinon/Samyang 24mm F/2.8 AF offers outstanding performance for an under \$300.00 lens and I would highly recommend it as an entry lens for wide angle rectilinear underwater photography along with the under \$600.00 AF 14mm F/2.8.

I would expect the results to be quite similar from the Canon and Nikon versions of these lens.

I would like to once again thank the staff at Asia Divers and El Galleno Beach Resort for support assistance with this review. Find out more about the Rokinon product-line at Rokinon.com.



Soft Coral, Puerto Galera, Philippines, Sony A7R III, Rokinon 24mm F/2.8, Nauticam NA-A7RIII housing, Zen 230mm dome port, Two Inon Z330 flashes, ISO-320, F/18, 1/30th sec



Bubble Coral, Puerto Galera, Sony A7R III, Rokinon 24mm F/2.8, Nauticam NA-A7RIII housing, Zen 230mm dome port, Two Inon Z330 flashes, ISO-320, F/22, 1/30th sec

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