



# **DEPLOYABLE FIBER OPTIC REEL AND BACK PACK SYSTEM**

## **MODULAR ADVANCED REEL SYSTEM (MARS)**

**Applied Optical Systems, Inc.** is pleased to introduce the first modular deployable reel system to fully integrate a back pack system as one of many deployment options. The AOS Fiber Optic **Modular Advanced Reel System (MARS)** incorporates many features unique to tactical fiber optic cable, not afforded by other back pack systems with metal style reels. Current back pack systems provide limited reel options and don't offer flexible configurations. **MARS** incorporates an entirely new philosophy of maximum modularity, designed throughout all accessories. Thus AOS AFO style reels are used in A-Frames, cradles, transit cases, tri-pods, bumper mounts, as well as on backpack systems. The customer has the flexibility to transfer AFO style reels from one accessory to another with full inter-operability. Additionally, AFO **MARS** reels include optional built in fiber optic cleaning kits; integrated rewind handle, 30ft built in divider, connector cradle storage design, and stackable features. All products are designed to be lighter weight, more functional and yet durable in today's rugged environment.



FEATURES	BENEFITS
<b>MODULAR DESIGN</b>	BACK PACK INTEGRATES WITH AOS AFO STYLE REEL SYSTEMS
<b>LIGHT WEIGHT CONSTRUCTION</b>	BOTH REEL AND BACK PACK FRAME BUILT WITH LIGHT WEIGHT YET DURABLE MATERIALS
<b>SELECTION OF REELS</b>	SELECTION OF 100M, 300M OR 500M REEL OPTIONS
<b>SLIP RING OPTION</b>	ENABLES UN-INTERRUPTIBLE SIGNAL TRANSMISSION DURING DEPLOYMENT OR ACQUISITION

### **INTEGRATED FIBER OPTIC (AND ELECTRICAL) SLIP RING OPTION**

**Applied Optical Systems "ARB" (AOS Reel Backpack)** can also accommodate either a fiber optic slip ring or a combination fiber optic/electrical slip ring option.

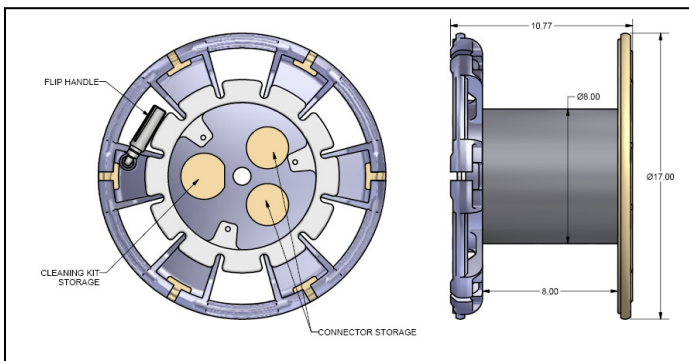
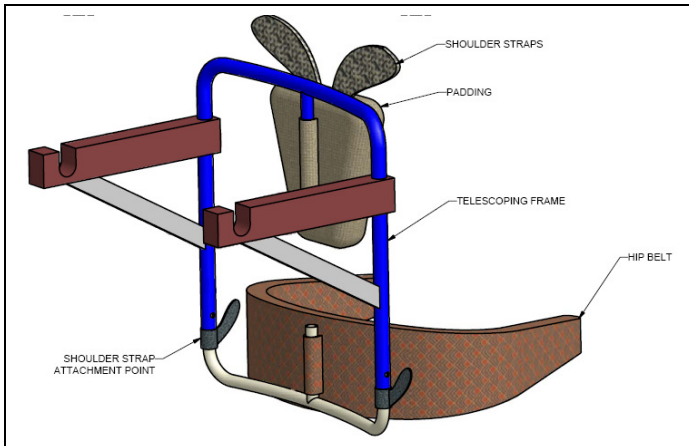
The slip ring option enables un-interruptible transmission of either fiber optic and/or power to/from the remote unit, while cable is being deployed.

The back is also designed to lay flat on the ground so that users can acquire or deploy the cable with an integrated handle feature.

The slip ring function adds 2.75lbs to the overall weight of the reel and can be ordered in 2 or 4 fibers, single mode (9/125um or multi-mode (62.5/125) and the option of two 24 AWG conductors. Slip ring voltage is rated at 600VDC and insertion loss contribution is 2.00dB MAX. at 9/125um.

The **Modular Advanced Reel System (MARS)** meets the unique demands of deployable fiber optic cable and provides critical functionality to the deployment personnel. The ability to deploy quickly and retrieve on various mounts and with an integrated rewind handle means time saved in the field or battle zone. Having an integrated cleaning kit built into the reel can be critical when remotely deployed and "dirt happens". The 30ft built in divider allowing the separate short tether end to be accessed easily, the efficient connector storage in the reel, and reel storage and stackable reel features allow for quick and secure operations of your communications networks.

All these features added to a lower weight than common reel systems, make **MARS** the most advanced fiber optic reeling system available in todays market!



### AOS MARS FAMILY OF REELS



### INTEGRATED CLEANING KIT



## Back Pack Options

Accessory Part Number	ARB	-0100	-X	-X	-B
Configuration Type	ARB Backpack (100, 300 500 meter reels)				Color B - Black T - Desert Tan
Reel size/Capacity (@ 5.5mm diameter Cable)	0100	100 meter	NOTE: Larger Reel sizes are Available (SEE BELOW) but may exceed Maximum personnel carry weight		"X" Used for Slip Ring Customization **
	0300	300 meter			
	0500	500 meter			

\*\*Note: Contact AOS for Slip ring and Reel Configuration Options

PART NUMBER	Flange Diameter	HUB DIAMETER	WIDTH	WEIGHT	CAPACITY 6mm OD Cable	CAPACITY * 7.2mm OD Cable
***-0100-X-Y	17"	10"	5"	9.5 LBS	100M	75M
***-0300-X-Y	17"	8"	7.75"	11 LBS	300M	200M
***-0500-X-Y	17"	8"	10.75"	11.5 LBS	500M	350M
***-0750-X-Y	17"	8"	14.75"	12 LBS	750M	500M
***-1000-X-Y	17"	8"	18.75"	13 LBS	1000M	700M
***-1500-X-Y	17"	8"	26.75"	14 LBS	1500M	1000M

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Patent pending