



## Overview

OCC is pleased to introduce the Modular Advanced Reel System (MARS). The industry's first lightweight cable deployment reel system designed specifically for the demanding needs of harsh-environment fiber optic installations. Unlike traditional metal-style reels, MARS is a lightweight, modular system constructed of a high-impact glass enforced polymer that is easily transported and is ideal for applications where cable needs to be deployed and reeled in quickly and stored efficiently. In addition, the MARS system offers a variety of deployment options including optional frames, backpacks, shipping cases, and cable acquisition platforms throughout. This enables customers to meet the demands of diverse markets with one modular reel and accessories platform. The OCC MARS reel can be used with simple deployable axials ("broom sticks") or with integrated A-Frames, cable acquisition cradles, transit case systems, tripods, bumper mounts, backpacks and backpacks with fiber optic slip rings. The MARS reel itself incorporates options for fiber optic cleaning kits: flip-out handle, 30 ft. built-in divider, connector cradle design, and stackable features. All these features (with a lower weight than common reel systems) make MARS the most advanced fiber optic reeling system available in today's market!

## Applications

- Mobile Emergency Telecommunications Stations
- Mobile Tactical Shelters
- United States Army, Navy, and Marine Corps Military Tactical Deployments
- Broadcast
- Emergency Restoration and Deployable Communications

# MODULAR ADVANCED REEL SYSTEM (MARS)



## MARS Specifications

SPECIFICATION	PARAMETER	RANGE
Operating Temperature	MIL-STD-810C, Method 501, 502	-0°C to +80°C
Storage Temperature	MIL-STD-810C, Method 501, 502	-45°C to +85°C
Temperature-Humidity Cycling	DOD-STD-1678, Method 4030	43°C, 98% Humidity
Drop Test	MIL-R-3241E, 3.5 ft. drop, 6 sides, 2 in. Fir wood on concrete	1000 m reel with cable, no degradation to operation
Vibration	EIA-364-28	3 axis, 10 to 33Hz, Hor. 0.020A (in.), Ver., 0.030A (in.)

AFO-0100	AFO-0300	AFO-0500	AFO-0750
			
AFO-1000	AFO-0505 SPLIT REEL	ART-TRIPOD/DEPLOYABLE SPINDLE (100, 300, 500 METERS)	ARA-T2 FRAME (750, 1000 METERS)
			

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## MARS Options

<p><b>ARN-CRADLE ACQUISITION SYSTEM (500 METERS AND LARGER)</b></p>	<p><b>ACC-TRANSIT CASE W/CRADLE (500 METERS AND LARGER)</b></p>	<p><b>ARS-REEL TRANSIT CASE (DUAL 100, 300 METERS)</b></p>	<p><b>ARS-REEL TRANSIT CASE (500 METERS AND LARGER)</b></p>
			
<p><b>ARB BACKPACK (300, 500 METERS)</b></p>	<p><b>AAR INTEGRATED AXLE REEL WITH BASE</b></p>	<p><b>ABM-BUMPER MOUNTED AXLE (100, 200, 500 METERS)</b></p>	<p><b>INTEGRATED FIBER OPTIC CLEANING KIT (K2000 SERIES KITS)</b></p>
			

OCC's MARS meets the challenge of today's harsh environment by offering an integrated solution to clean and maintain multi-channel cylindrical fiber optic connectors in the field. MARS can be provisioned with a variety of cleaning kits that correspond to popular connector styles including MIL-DTL-83526, MIL-PRF-28876, MIL-DTL-38999, NAVSEA Pierside, MIL-C-83526 (TFOCA), F-LINK™ and TFOCA-II®. Cleaning Kits and Restoration Kits are available for 4, 6, 8, 12, 18 and 24 channel-style connectors. MARS has been tested in accordance with military specifications for cable reels.

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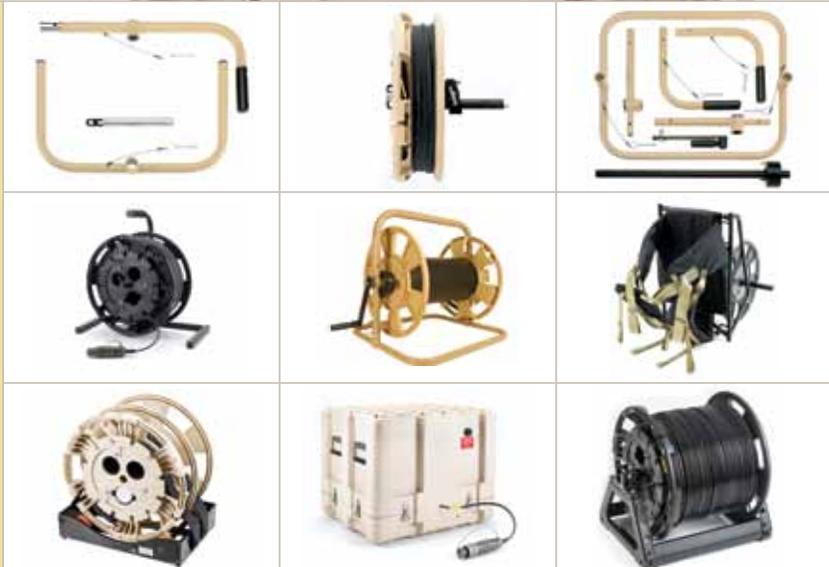
## Features and Benefits

FEATURES		BENEFITS
Fabricated with high-impact glass reinforced polymer material		Provides durability and strength while affording lightweight benefits.  Eliminates rust resulting from field operation.
Integrated cable payout and storage area		Enables operator to deploy small lengths of fiber cable without having to unspool the entire payload. Payout area does not impact cable volume.
Interlocking stacking system		Enables reels to be stacked and interlocked during transit.
Integrated connector storage		Affords multi-channel cylindrical connectors to be stored and locked in place for transit.  Accommodates 0.50" to 2.1" diameter connectors.
Molded hand openings		Allow for easy hand transportation and deployment.

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## Features and Benefits

FEATURES		BENEFITS
Integrated cleaning kit compartment	 <p>K2000 Series Cleaning Kits</p>	Built-in fiber optic connector cleaning kit allows operators to maintain connectors during deployable situations.
Lightweight retractable crank and handle system		Allows operators to easily rotate reel in deployment or take-up situations and store handle during transit.
Square flange option		AFO-Style Reels can be provisioned with either 1" diameter round hole or 1" square axle hole.
Comprehensive inventory of integrated accessories and options		Options include integrated transit cases, deployable "T" frames, backpacks and more.

## Reel Ordering Information

Reel Part Numbering	AFO	-0100	-T	-M	-1
<b>CONFIGURATION TYPE</b> <b>ACR</b> Reel type Commercial (Black only) <b>AFO</b> Reel type Military (Desert Tan/Carc Green only)					<b>AXLE TYPE</b> <b>1</b> 1" Round Axle Hole <b>2</b> 1" Square Axle Hole
<b>REEL SIZE/CAPACITY (@ 5.5 MM DIAMETER CABLE)</b> <b>0100</b> 100 meters <b>0300</b> 300 meters <b>0500</b> 500 meters <b>0750</b> 750 meters <b>1000</b> 1000 meters					<b>INTEGRATED REEL CLEANING KIT*</b> <b>A</b> 4/12 CH M83526 <b>B</b> Expanded Beam <b>E</b> 4/12 CH EZ-Mate™ <b>F</b> F-Link Style Connectors <b>H</b> Hermaphroditic/SMPTE ferrule connectors <b>J</b> 6/24 CH EZ-Mate™ <b>N</b> M28876 ferrule connectors <b>P</b> NAVSEA Pierside ferrule connectors <b>Q</b> 2.5 mm ferrule connectors <b>S</b> 1.6-2.0 mm ferrule connectors <b>T</b> 2 CH TFOCA <b>U</b> 1.25 mm ferrule connectors <b>X</b> None
<b>REEL COLOR</b> <b>T</b> Desert Tan <b>G</b> Carc Green <b>B</b> Black ** Custom colors available					

Accessory Part Number	ART	-0100	-X	-X	-B
<b>CONFIGURATION TYPE</b> <b>ARN</b> Reel Acquisition Cradle system (500, 750, 1000 meters) <b>ART</b> Tripod, Deployable (100, 300, 500 meters) <b>ATB</b> Tripod, Deployable w/Brake (100,300, 500 meters ) <b>ARB</b> Backpack (300, 500 meters) <b>ARR</b> Backpack w/FO/Electrical Slip Ring (500 meters) <b>ARS</b> Transit Case Reel storage, (100, 2100 (dual-100m), 300, 500, 750, 1000) <b>ACC</b> Transit Case w/Acquisition Cradle, (500, 750, 1000 meters) <b>ARA</b> T2-Frame, Deployable (750, 1000 meters) <b>ABF</b> T2-Frame, Deployable w/Brake (750, 1000 meters) <b>ARI</b> Field Installed Braking System for Tripod (100, 300, 500 meters) <b>ARC</b> Field Installed Braking System for T2-Frame (750, 1000 meters) <b>ACD</b> Modular, Deployable Cartridge System (500, 750, 1000 meters) <b>ACF</b> Modular, Deployable Cartridge System w/Caster Wheels (500, 750, 1000 meters) <b>ABM</b> Bumper-Mounted Axle (100, 300, 500 meters) <b>AAR</b> Integrated Axle Reel (700, 1000 meters) <b>AAB</b> Base for Integrated Axle Reel (700, 1000 meters)					<b>COLOR</b> (TRIPOD/CASE/T2-FRAME) <b>X</b> N/A <b>T</b> Desert Tan <b>G</b> Carc Green <b>B</b> Black
<b>REEL SIZE/CAPACITY (@ 5.5 MM DIAMETER CABLE)</b> <b>0100</b> 100 meters <b>0300</b> 300 meters <b>0500</b> 500 meters <b>0750</b> 750 meters <b>1000</b> 1000 meters					

Custom accessories available; contact OCC for information.

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## Reel Ordering Specifications

PART NO.	FLANGE DIAMETER	HUB DIAMETER	WIDTH	WEIGHT	CAPACITY 5.5 MM OD CABLE	CAPACITY 7.2 MM OD CABLE
***-0100-X-Y	17"	10"	5"	9.5 Lbs.	100 M	75 M
***-0300-X-Y	17"	8"	7.75"	11 Lbs.	300 M	200 M
***-0500-X-Y	17"	8"	10.75"	11.5 Lbs.	500 M	350 M
***-0750-X-Y	17"	8"	14.75"	12 Lbs.	750 M	500 M
***-1000-X-Y	17"	8"	18.75"	13 Lbs.	1000 M	700 M

### REPLACEMENT – INTEGRATED CLEANING KITS

K2000-KAC00x	4/12 CH M83526
K2000-KBC00x	Expanded Beam
K2000-KEC00x	4/12 CH EZ-MATE™
K2000-KFC00x	F-Link Style Connectors
K2000-KHC00x	Hermaphroditic/SMPTE
K2000-KJC00x	6/24 CH EZ-MATE™
K2000-KNC00x	M28876
K2000-KPC00x	NAVSEA Pierside
K2000-KQC00x	2.5 mm ferrule
K2000-KSC00x	1.6–2.0 mm ferrule
K2000-KTC00x	2 CH TFOCA
K2000-KUC00x	1.25 mm ferrule

#### Notes:

For AFO/ACR-0100, x = 1

For AFO/ACR-0300 or greater, x = 2



TFOCA-II® is a registered Trademark of Amphenol Fiber Systems International



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