



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, MARS 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!


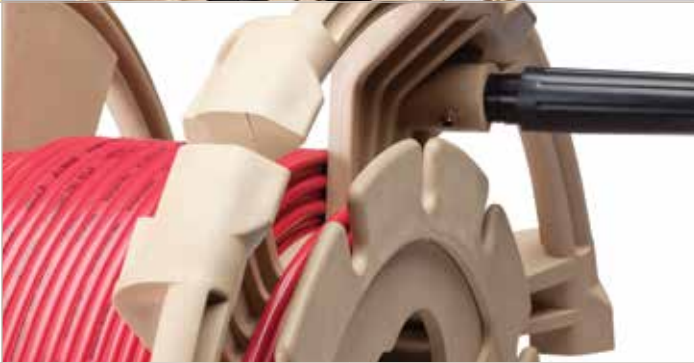



Applications

- Mobile Emergency Telecommunications Stations
- Mobile Tactical Shelters
- U.S. Army, Navy, and Marine Corps Military Tactical Deployments
- Broadcast
- Emergency Restoration and Deployable Communications

MODULAR ADVANCED REEL SYSTEM (MARS)





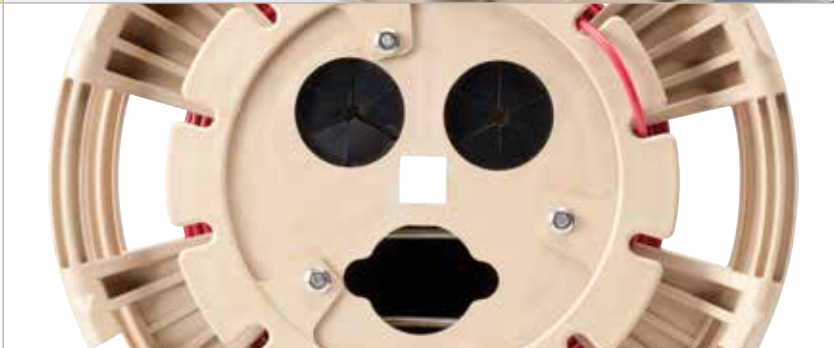
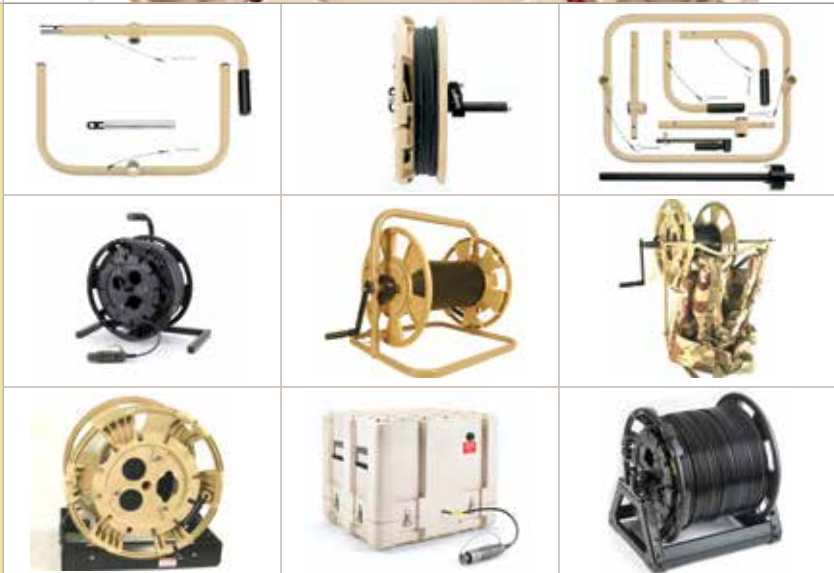
Modular Advanced Reel System (MARS) – Features and Benefits

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		Allows for easy hand transportation and deployment.

MODULAR ADVANCED REEL SYSTEM (MARS)



Modular Advanced Reel System (MARS) – Features and Benefits

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

MODULAR ADVANCED REEL SYSTEM (MARS)



Modular Advanced Reel System (MARS) – Options

<p>AFO-0100</p> 	<p>AFO-0300</p> 	<p>AFO-0500</p> 	<p>AFO-0750</p> 
<p>AFO-1000</p> 	<p>AFO-0505 SPLIT REEL</p> 	<p>ART-TRIPOD/DEPLOYABLE SPINDLE (100, 300, 500 METERS)</p> 	<p>ARA-T2 FRAME (750, 1000 METERS)</p> 
<p>ARN-CRADLE ACQUISITION SYSTEM (300 METERS AND LARGER)</p> 	<p>ACC-TRANSIT CASE W/CRADLE (300 METERS AND LARGER)</p> 	<p>ARS-REEL TRANSIT CASE (DUAL 100, 300 METERS)</p> 	<p>ARS-REEL TRANSIT CASE (500 METERS AND LARGER)</p> 
<p>ARB BACKPACK (300, 500 METERS)</p> 	<p>AAR INTEGRATED AXLE REEL WITH BASE</p> 	<p>ABM-BUMPER MOUNTED AXLE (100, 200, 500 METERS)</p> 	<p>INTEGRATED FIBER OPTIC CLEANING KIT (K2000 SERIES KITS)</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-, 1-2, 18- and 24-channel-style connectors. MARS has been tested in accordance with military specifications for cable reels.

MODULAR ADVANCED REEL SYSTEM (MARS)



Modular Advanced Reel System (MARS) – Options



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

Accessory Part Number	ART	-0100	-X	-X	-B	
CONFIGURATION TYPE ARN Reel acquisition cradle system (300, 500, 750, 1000 meters) ART Tripod, deployable (100, 300, 500 meters) ATB Tripod, deployable w/brake (100, 300, 500 meters) ARB Backpack (300, 500 meters) ARR Backpack w/FO/electrical slip ring (500 meters) ARS Transit case reel storage, (100, 2100 [dual-100m], 300, 500, 750, 1000) ACC Transit case w/acquisition cradle, (500, 750, 1000 meters) ARA T2-frame, deployable (750, 1000 meters) ABF T2-frame, deployable w/brake (750, 1000 meters) ARI Field installed braking system for tripod (100, 300, 500 meters) ARC Field installed braking system for T2-frame (750, 1000 meters) ACD Modular, deployable cartridge system w/caster wheels (500, 750, 1000 meters) ABM Bumper-mounted axle (100, 300, 500 meters) AAR Integrated axle reel (700, 1000 meters) AAB Base for integrated axle reel (700, 1000 meters)					COLOR (TRIPOD/CASE/T2-FRAME) X N/A T Desert Tan G Carc Green B Black	
REEL SIZE/CAPACITY (@ 5.5MM DIAMETER CABLE) 0100 100 meters 0300 300 meters 0500 500 meters 0750 750 meters 1000 1000 meters						

Custom accessories available; contact OCC for information.

Modular Advanced Reel System (MARS) – Performance Specifications

Performance 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, 3.5ft. drop, 6 sides, 2 in. fir wood on concrete	1000m reel with cable, no degradation to operation
Vibration	EIA-364-28	3 axis, 10 to 33Hz, Hor. 0.020A (in.), Ver., 0.030A (in.)

Ordering Specifications

PART NO.	FLANGE DIAMETER	HUB DIAMETER	WIDTH	WEIGHT	CAPACITY 5.5MM 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

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	2.5mm ferrule
K2000-KSC00x	1.6–2.0mm ferrule
K2000-KTC00x	2 CH TFOCA
K2000-KUC00x	1.25mm 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.

MODULAR ADVANCED REEL SYSTEM (MARS)



Modular Advanced Reel System (MARS) – Cartridge System

The most advanced, self-contained fiber optic reeling system available.

Introducing Optical Cable Corporation's MARS™ Cartridge System, another accessory member of Modular Advanced Reel System specifically designed for fiber optic cable. The MARS Cartridge System offers the most advanced, self-contained fiber optic reeling system for broadcast, military or deployable communication environments. MARS reels are designed to interoperate across a full family of reel accessories. The MARS Cartridge System employs many of the same cradle features found in the MARS Cradle System (reel release knob and roller reels), allowing multiple reels to be exchanged within one platform.

Features & Benefits:

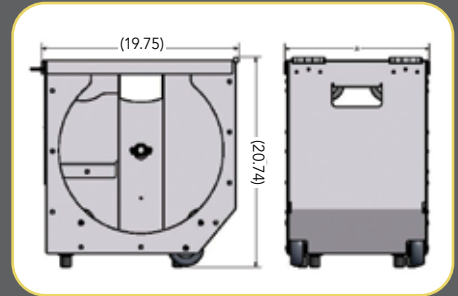
- Self enclosed metal case eliminates the need for shipping containers
- Gravity latch lid automatically holds the open lid in upright position
- Flip lid/tote handle and wheeled luggage capability allow for easy transport of cartridge system through airports, stages and other venues
- Reel roller elements and release knob allow reels to be interchanged or removed from cartridge
- Stackability/interlock feature allows for easy storage and transport of multiple cartridge systems; wheels and floor mounts protrude into the lid to form an interlocking system; a lock pin is used to interlock two or more cartridges together, and they are designed to sustain 600 lbs. of cargo
- Built-in tool box stores critical tools and fixtures during transport



MODULAR ADVANCED REEL SYSTEM (MARS)



Modular Advanced Reel System (MARS) – Cartridge System



Performance Specifications

PART NUMBER	DESCRIPTION	
Temperature-humidity cycling	EIA/TIA-455-5C, 240 hrs.	-40°C to 85°C, 95% RH
Storage testing	EIA/TIA-455-5C	-40°C to 85°C
Vibration	Frequency = 10 to 33Hz, Amplitude = horizontal 0.020", vertical = 0.030"	Duration = 6 hours
Drop test	3.5 ft. drop onto concrete floor, full load	3 sides

Ordering Information

PART NUMBER	DESCRIPTION	HEIGHT	WIDTH	DEPTH	WEIGHT
ACD-0500-X-X-y	Modular, deployable cartridge system with wheels, 500m	20.74"	19.75"	14.5"	23 lbs.
ACD-0750-X-X-y	Modular, deployable cartridge system with wheels, 750m	20.74"	19.75"	18.5"	28 lbs.
ACD-1000-X-X-y	Modular, deployable cartridge system with wheels, 1000m	20.74"	19.75"	22.5"	33 lbs.

Replace "y" for cartridge system color – **T** = desert tan, **B** = black, **G** = carc green.



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