

# OPERATIONAL RESERVE

## OR-Series Reserve Canopies

The Operational Reserve (OR) is an advanced 9-cell elliptical ram-air design that fully compliments the Military Silhouette (MS) main parachutes in size, glide performance and landing capability. The OR's operational weight limits are also higher than a comparable 7-cell reserve in the same size range.

The OR reserves were designed to meet the high demand for tactical 9-cell reserve canopies that support various airborne operations for solo jumpers outfitted with full combat equipment.

Following years of development and refinement, the Operational Reserve Series successfully meets the military's solo-jumper performance requirements needed for carrying heavy weights at high altitudes during HAHO operations.

### OR-SERIES OPERATIONAL RESERVE

- Is rated to an all up weight (AUW) of 355-490 lb (161 - 222 kg)
- Is HAHO & HALO capable of 35,000 ft (10,668 m) MSL
- Has similar flight characteristics to CPS 9-cell main parachutes

The OR-Reserves passed a series of proprietary evaluation tests for opening characteristics, flight stability, overall handling and landing performance. The result is a reserve canopy that exhibits performance parallel to the CPS 9-cell main parachutes. Your mission will not be compromised in the event of a main parachute malfunction.



# PRODUCT SPECIFICATIONS OR - SERIES RESERVE 9 - Cell Reserve Parachute

MODEL / SIZE	OR-360	OR-330	OR-300	OR-280	OR-260
ASPECT RATIO	2.52:1	2.52:1	2.52:1	2.52:1	2.52:1
CANOPY AREA	360 sq ft (33.4 sq m)	330 sq ft (30.7 sq m)	300 sq ft (27.9 sq m)	280 sq ft (26.0 sq m)	260 sq ft (24.2 sq m)
CANOPY SPAN	30.1 ft (9.17 m)	28.8 ft (8.78 m)	27.5 ft (8.38 m)	26.5 ft (8.08 m)	25.6 ft (7.80 m)
CANOPY CHORD CENTER/TIP	12.3 ft/10.8 ft (3.75 m/3.29 m)	11.8 ft/10.3 ft (3.6 m/3.14 m)	11.2 ft/9.9 ft (3.41 m/3.02 m)	10.9 ft/9.5 ft (3.32 m/2.9 m)	10.5 ft/9.2 ft (3.20 m/2.80 m)
MAXIMUM WEIGHT	490 lb (222 kg)	450 lb (204 kg)	410 lb (186 kg)	380 lb (172 kg)	355 lb (161 kg)
MAXIMUM DEPLOYMENT ALTITUDE (MSL)	Capable - 35,000 ft (10,668 m) Demonstrated - 25,000 ft (7,620 m)				
MINIMUM DEPLOYMENT ALTITUDE (AGL)	1,900 ft (579 m)	1,900 ft (579 m)	1,500 ft (457 m)	1,500 ft (457 m)	1,500 ft (457 m)
MAXIMUM DEPLOYMENT SPEED	150 KTS EAS @ Sea Level				
DEPLOYMENT METHOD	High-speed Reserve Freebag Optional				
CANOPY MATERIAL TYPE	0.5 - 3 CFM Ripstop Nylon Fabric				
CANOPY CONSTRUCTION	Chord-wise construction, full cell I-beam, with span-wise and chord-wise reinforcement				
LINE TYPE AND STRENGTH	Untreated Polyester 600, 900, 1200 and 1500 lb				
GLIDE RATIO	Approximately 3.5:1				
STALL	Resistant to stall with gentle stall characteristics				
TURN RATE - 180° TURN	Approximately 2 seconds				
TURN RATE - 360° TURN	Approximately 3 - 5 seconds				
FORWARD SPEED FULL FLIGHT	28 - 40 mph (45 - 64 km/h)				
RATE OF DESCENT FULL FLIGHT	10 - 16 ft/s (3.0 - 4.9 m/s)				
RATE OF DESCENT BRAKES STOWED	8 - 10 ft/s (2.4 - 3.0 m/s)				
<b>TESTING SUMMARY</b>					
TEST ALTITUDE RANGE, LIVE JUMPS	From 800 ft AGL to 25,000 ft MSL (243.8 m AGL to 7620 m MSL)				
MAXIMUM WEIGHT TESTED	From 60 KIAS at 3000 ft (914 m) to 130 KIAS at 25,000 ft (7,620 m)				
MAXIMUM LIVE WEIGHT TESTED AT ALTITUDE	675 lbs (306 kg) at 180 KIAS				
MINIMUM LIVE WEIGHT TESTED AT ALTITUDE	490 lbs (222 kg) at 120 KIAS at 25,000 ft (7,620 m)				
ALTITUDE LOSS AFTER A BREAKAWAY	400 ft to 600 ft (122 m to 183 m)				