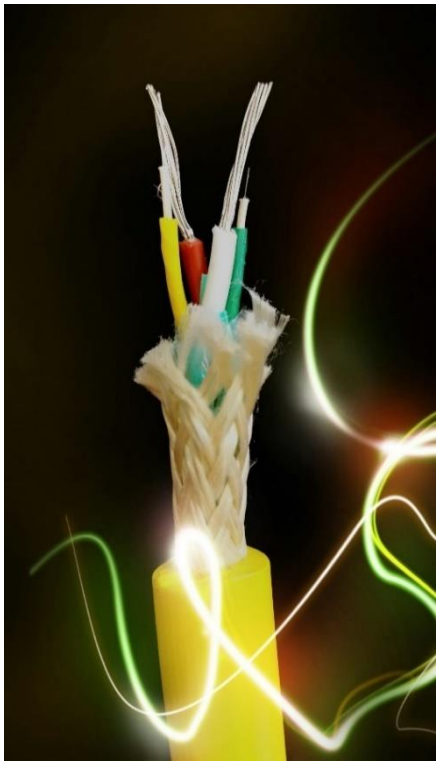
Hybrid Cables

Rugged & Durable

Buoyant

Thin & Lightweight



Hybrid Cables

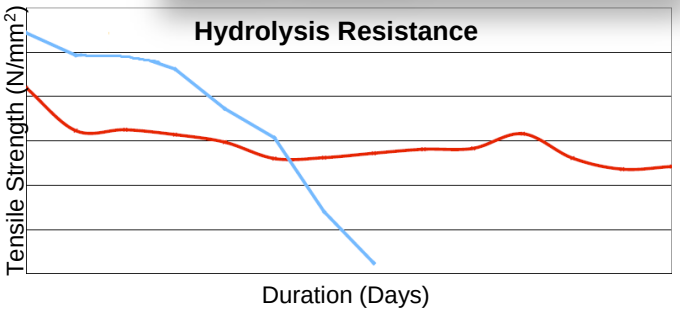
Linden Photonics **hybrid cables** combine copper and fiber elements in a **lightweight**, yet strong and robust tether cable. Linden can customize your size, buoyancy and strength; from **neutrally buoyant** designs to extremely thin cables with various conductor offerings and fiber types available. Linden's patented cable jacket construction is designed to protect delicate fibers in the harsh subsea environment. Linden's hybrid cables are compact and rugged; flexible and strong.

Features

- Rugged, durable patented STFOC fiber optic elements
- Hermetic coating protects fiber from moisture
- Buoyant designs
- Thin wall insulation = thinner/lighter cables
- Fiber strength members = lighter cables
- Vectran strength members available offering less self-abrasion and longer service life
- 300V, 600V & 1,000V standard ratings

Our standard TPU is an **Ether grade** providing better hydrolysis performance in moisture rich environments.

Ester grades are available non-humid environments requiring improved abrasion resistance.



Advantages

- Virtually crush proof
- Non-corrosive
- Thin, lightweight, yet strong
- Withstands high hydrostatic pressure
- Synthetic strength members for higher strength and lower weight

CONTACT LINDEN FOR DRAWINGS, SPECIFICATIONS OR CUSTOM REQUIREMENTS

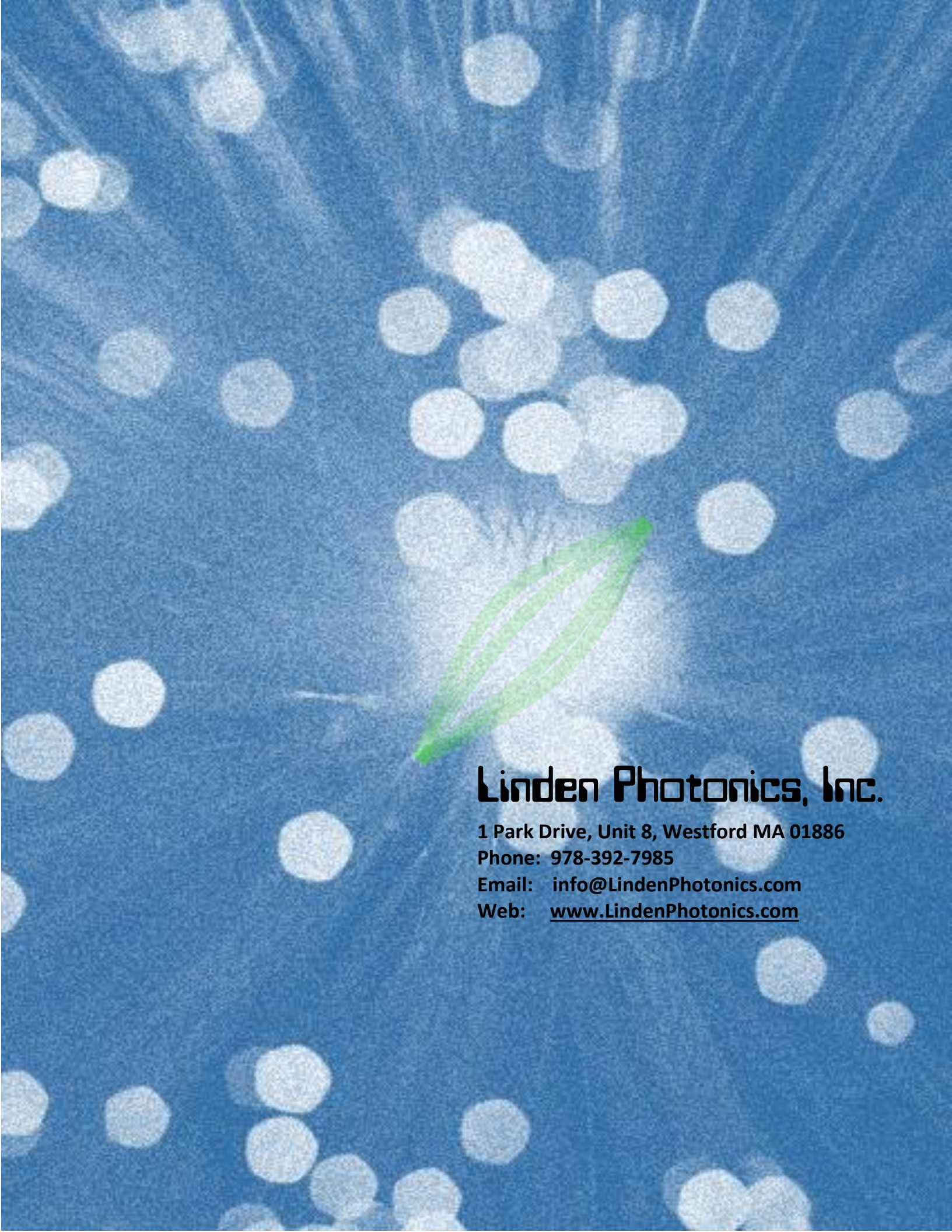
Specifications

Spec No.	Part No.	OD (mm)	Fiber Type	Conductor	UTS (lbs)
1 x Singlemode (SM)					
LINDEN-SPE-7136	1-FO-2-CU-BB-120-22759	3	1 x SM	2 x #22	N/A
LINDEN-SPE-7373	1-FO-6-CU-O-11-Q-135	3.2	1 x SM	6 x #26	450
LINDEN-SPE-7148*	1-FO-2-CU-O-10-FQ-146-YEL	3.7	1 x SM	2 x #28	450
LINDEN-SPE-7149*	1-FO-2-CU-O-10-FQ-192-YEL	4.9	1 x SM	2 x #24	450
LINDEN-SPE-7218*	1-FO-2-CU-O-10-FQ-192-YEL-95A	4.9	1 x SM	2 x #24	450
LINDEN-SPE-7221*	1-FO-2-CU-O-10-FMM-192-YEL	4.9	1 x SM	2 x #24	450
LINDEN-SPE-7290	1-FO-2-CU-O-171-FQ-211	5.4	1 x SM	2 x #16	250
LINDEN-SPE-7170	1-FO-4-CU-S-138-O-168-L-228	5.8	1 x SM	4 x #22	450
LINDEN-SPE-7104	1-FO-2-CU-O-155-Q-250	6.4	1 x SM	2 x #20	880
LINDEN-SPE-7161*	1-FO-3-CU-O-150-FQ-250	6.35	1 x SM	1 x #20 (TP) & #28	1,600
LINDEN-SPE-7195*	1-FO-2-CU-O-150-FQ-250	6.35	1 x SM	2 x #20	1,600
LINDEN-SPE-7326	1-FO-3-CU-O-150-FQ-250-NN-295	7.5	1 x SM	2 x #20 & 1 x #28 DW	1,600
LINDEN-SPE-7481	1-FO-8-CU-NN-200-O-205-Q-315	8.0	1 x SM	3 x #24 & 1 x #24 TP	300
LINDEN-SPE-7141*	1-FO-8-CU-O-235-FQ-323	8.2	1 x SM	8 x #26	1,500
LINDEN-SPE-7248*	1-FO-6-CU-O-197-FQ-338	8.6	1 x SM	2 x #20, 2 x #24 TP	200
LINDEN-SPE-7153*	1-FO-2-CU-O-263-FQ-362	9.2	1 x SM	2 x #20 TP	1,600
LINDEN-SPE-7128*	1-FO-2-CU-O-312-FQ-412	10.5	1 x SM	2 TP x #22	5,000
LINDEN-SPE-7386*	1-FO-2-CU-X-288O-288-FQ-434	11.0	1 x SM	2 x #17 & 1 x #26 DW	1,200
LINDEN-SPE-7131*	1-FO-5-CU-O-260-FQ-460	11.7	1 x SM	5 x #18	1,100
LINDEN-SPE-7110*	1-FO-3-CU-Q-328-R-500	13	1 x SM	3 x #16	450
LINDEN-SPE-7480	1-FO-12-CU-O-287-FQ-550	14	1 x SM	12 x #22	1,000
LINDEN-SPE-7194*	1-FO-2-CU-O-420-FQ-1036	26.3	1 x SM	2 x #8	1,250
2 x Singlemode (SM)					
LINDEN-SPE-7277	2-FO-2-CU-O-171-FQ-211	5.4	2 x SM	2 x #16	250
LINDEN-SPE-7152*	2-FO-2-CU-O-155-Q-215	5.5	2 x SM	2 x #24	2,100
LINDEN-SPE-7345	2-FO-2-CU-O-197-OO-260	5.5	2 x SM LT	2 x #16	2,400
LINDEN-SPE-7107*	2-FO-2-CU-O-155-Q-235	6	2 x SM	2 x #24	2,100
LINDEN-SPE-7311	2-FO-3-CU-O-173-Q-252	6.4	2 x SM	3 x #20	250
LINDEN-SPE-7189*	2-FO-2-CU-O-150-FQ-278	7.1	2 x SM	1 x #20 TP & 1 x #28 DW	1,600
LINDEN-SPE-7327	2-FO-3-CU-O-150-FQ-250-NN-295	7.9	2 x SM	1 x #20 TP & 1 x #28 DW	3,200
LINDEN-SPE-7120	2-FO-3-CU-O-280-Q-320	8.1	2 x SM	3 x #22	5,500
LINDEN-SPE-7138*	2-FO-2-CU-O-225-FQ-330	8.4	2 x SM	2 x #18	1,000
LINDEN-SPE-7164	2-FO-2-CU-O-207-Q-337	8.6	2 x SM	2 x #20	2,400
LINDEN-SPE-7177	2-FO-5-CU-O-246-Q-366	9.3	2 x SM LT	4 x #18 & 1 x #24 STP	1,760
LINDEN-SPE-7122	2-FO-2-CU-O-155-Q-390	9.9	2 x SM	2 x #16	2,200
LINDEN-SPE-7355	2-FO-2-CU-Q-138-O-320-B-390	9.9	2 x SM LT	2 x #24	16,000
LINDEN-SPE-7123	2-FO-2-CU-T-320-Q-400	10.2	2 x SM	2 x #14	800
LINDEN-SPE-7468	2-FO-3-CU-O-388-FQ-400	10.2	2 x SM LT	2 x #16 & 2 x #18	1,000
LINDEN-SPE-7103	2-FO-2-CU-O-155-Q-420	10.7	2 x SM	4 x #13	1,300
LINDEN-SPE-7469*	2-FO-3-CU-O-388-FQ-400-S-430	10.9	2 x SM LT	2 x #16 & 1 x #18	1,000
LINDEN-SPE-7293	2-FO-2-CU-O-388-Q-448	11.4	2 x SM	2 x #12	4,000
LINDEN-SPE-7462	2-FO-6-CU-O-352-Q-452	11.5	2 x SM LT	6 x #18	10,000
LINDEN-SPE-7227	2-FO-6-CU-X-297-O-327-DD-470-ORN	12	2 x SM	4 x #16, 2 x #24 TP	5,000
LINDEN-SPE-7500*	2-FO-5-CU-O-217-FQ-442-Q-472	12	2 x SM LT	4 x #20, 1 x #28 DW & 1 x #28 SW	1,600
LINDEN-SPE-7313	2-FO-2-CU-Q-138-O-320-B-475	12.1	2 x SM	2 x #14	800
LINDEN-SPE-7178*	2-FO-5-CU-O-246-M-405-Q-484	12.3	2 x SM LT	4 x #18, #24STP	1,760
LINDEN-SPE-7100*	2-FO-2-CU-O-155-Q-500	12.7	2 x SM	2 x #14	2,100
LINDEN-SPE-7291	2-FO-2-CU-NN-216-Z-422-S-530	13.5	2 x SM	2 x #16	12,000
LINDEN-SPE-7241*	2-FO-4-CU-O-55-S-65-FQ-535-ORN	13.6	2 x SM	4 x #16	3,200
LINDEN-SPE-7106*	2-FO-4-CU-O-155-Q-550	13.9	2 x SM	4 x #20	1,573
LINDEN-SPE-7109	2-FO-5-CU-O-155-Q-550	13.9	2 x SM	5 x #16	15,400
LINDEN-SPE-7222	2-FO-4-CU-S-280-O-450-S-550	14	2 x SM	4 x #20	11,000
LINDEN-SPE-7292	2-FO-2-CU-JJ-415-Q-550	14	2 x SM	2 x #16	29,000
LINDEN-SPE-7125*	2-FO-2-CU-Q-557	14.1	2 x SM	2 x #16	1,200
LINDEN-SPE-7465*	1-FO-6-CU-O-273-FQ-530	14.6	2 x SM	6 x #18	2,000

Spec No.	Part No.	OD (mm)	Fiber Type	Conductor	UTS (lbs)
LINDEN-SPE-7228*	2-FO-2-CU-365-FQ-585-YEL	14.9	2 x SM	2 x #16	2,200
LINDEN-SPE-7354	2-FO-5-CU-Q-322-T-500-B-600	15.25	2 x SM LT	5 x #16	14,000
LINDEN-SPE-7501*	2-FO-4-CU-NN-332-O-344-FQ-650	16.5	2 x SM	4 x #14	1,250
LINDEN-SPE-7233*	2-FO-2-CU-O-397-FQ-617-YEL	15.7	2 x SM	2 x #16	2,600
LINDEN-SPE-7139	2-FO-4-CU-S-377-T-525-GG-620	15.7	2 x SM	4 x #16	12,320
LINDEN-SPE-7276*	2-FO-6-CU-X-358-O-398-FQ-628-YEL	16	2 x SM	4 x #18, 1 x #22 STP	3,200
LINDEN-SPE-7262*	2-FO-6-CU-O-155-FQ-638-ORN	16.2	2 x SM (LT)	4 x #16, 2 x #24TP	5,000
LINDEN-SPE-7249*	2-FO-5-CU-X-252-0282-FQ-674-ORN	17.11	2 x SM	4 x #16, 1 x #28 TP	3,200
LINDEN-SPE-7126	2-FO-12-CU-T-535-FQ-709	18	2 x SM	2 x #14, 10 x #23 TP	3,600
LINDEN-SPE-7111*	2-FO-3-CU-S-730	18.5	2 x SM(LT)	3 x #18	2,200
LINDEN-SPE-7252*	2-FO-4-CU-M-496-O-536-FQ-800-ORN	20.3	2 x SM (LT)	4 x #18	2,300
3 x Singlemode (SM)					
LINDEN-SPE-7162*	3-FO-1-CU-O-175-FQ-275	7	3 x SM	1 x #20 (TP)	1,600
LINDEN-SPE-7350	3-FO-2-CU-O-164-L-275	7	3 x SM	2 x #24	450
LINDEN-SPE-7142*	3-FO-2-CU-O-20-Q-367	9.3	3 x SM	2 x #14	1,500
LINDEN-SPE-7166	3-FO-2-CU-O-325-Q-415-YEL	10.5	3 x SM	2 x #12	1,200
LINDEN-SPE-7160*	3-FO-4-CU-O-322-FQ-475-Q-511-YEL	13	3 x SM	2 x #20	1,600
LINDEN-SPE-7395	3-FO-3-CU-S-289-O-413-NN-443-B-540	13.7	3 x SM	3 x #20	14,000
LINDEN-SPE-7251	3-FO-4-CU-O-585-Q-685	17.4	3 x SM	2 x #6, 2 x #9	3,500
LINDEN-SPE-7113	3-FO-3-CU-O-630-DD-770	19.6	3 x SM	3 x #16	35,200
LINDEN-SPE-7237	3-FO-7-CU-Q-590-O-760-Q-858-YEL	21.8	3 x SM	7 x #10	11,000
LINDEN-SPE-7231*	3-FO-4-CU-O-764-FQ-923-BLK	23.4	3 x SM	3 x #11, 1 x #20 TP	15,500
4 x Singlemode (SM)					
LINDEN-SPE-7466	1-FO-3-CU-PP-O-250-Q-310	7.9	4 x SM (LT)	3 x #14 & Coax	750
LINDEN-SPE-7391*	4-FO-2-CU-O-208-FQ-350	8.9	4 x SM (LT)	2 x #16	1,100
LINDEN-SPE-7167	4-FO-2-CU-O-327-Q-417-YEL	10.6	4 x SM	2 x #12	1,200
LINDEN-SPE-7206	4-SM-10-CU-Q-439	11.2	4 x SM	10 x #18	-
LINDEN-SPE-7392*	4-FO-2-CU-O-230-FQ-450	11.4	4 x SM (LT)	2 x #14	1,100
LINDEN-SPE-7124*	4-FO-4-CU-O-55-S-65-FQ-470	11.93	4 x SM (LT)	2 x #18, 2 x #22, 2 x #24	3,200
LINDEN-SPE-7163	4-FO-4-CU-O-55-FQ-457-ORN	11.6	4 x SM (LT)	2 x #18, 2 x #22, 2 x #24	3,200
LINDEN-SPE-7199*	4-FO-4-CU-O-55-S-65-FQ-470	11.93	4 x SM (LT)	2 x #18, 2 x #22, 1 x #24	3,200
LINDEN-SPE-7363	4-FO-4-CU-O-55-S-65-S-460	11.96	4 x SM (LT)	2 x #18, 2 x #22, 1 x #24	3,200
LINDEN-SPE-7102	4-FO-4-CU-O-155-DD-470	12.0	4 x SM	4 x #16	5,500
LINDEN-SPE-7261*	4-FO-6-CU-O-55-S-65-FQ-480-ORN	12.2	4 x SM (LT)	2 x #18, 2 x #22, 2 x #24	3,200
LINDEN-SPE-7151*	4-FO-4-CU-S-287-O-387-FQ-547	13.9	4 x SM	4 x #20	5,500
LINDEN-SPE-7143	4-FO-4-CU-S-280-O-450-S-550	14.0	4 x SM	4 x #20	11,000
LINDEN-SPE-7330*	4-FO-6-CU-O-55-S-70-FQ-600	15.25	4 x SM (2 x LT)	4 x #19, 1 x 24, 1 x #22	5,000
LINDEN-SPE-7325	4-FO-6-CU-O-55-S-75-MM-590	15.0	4 x SM (2 x LT)	4 x #19, 1 x #24, 1 x #22	6,000
LINDEN-SPE-7303	4-FO-7-CU-O-350-FQ-610-YEL	15.5	4 x SM (LT)	7 x #18	4,800
LINDEN-SPE-7219*	4-FO-6-CU-O-55-S-75-FQ-590-ORN	15.0	4 x SM(LT)	4 x #18, 1 x #22, 1 x #24	6,000
LINDEN-SPE-7101	4-FO-4-CU-O-175-Q-650	16.5	4 x SM	4 x #16	23,100
LINDEN-SPE-7108*	4-FO-8-CU-O-155-Q-910	23.1	4 x SM	8 x #18	15,400
LINDEN-SPE-7471	4-FO-4-CU-S-787-W-890-S-1023	26	4 x SM	4 x #4	25,800
5, 6, 8 & 12 x Singlemode (SM)					
LINDEN-SPE-7308	5-FO-2-CU-Q-248	6.3	5 x SM	2 x #18	-
LINDEN-SPE-7250	8-FO-4-CU-O-236-Q-332	8.43	8 x SM	4 x #16	450
LINDEN-SPE-7121	12-FO-8-CU-Q-350	8.9	12 x SM	8 x #18	-
LINDEN-SPE-7255	6-FO-6-CU-O-336-B-480-BLK	12.2	6 x SM	6 x #18	13,800
LINDEN-SPE-7348	8-FO-2-CU-Q-223-O-583-Q-710	18.0	8 x SM (LT)	2 x #18	30,000
LINDEN-SPE-7349	8-FO-2-CU-Z-786-S-930	23.6	8 x SM (LT)	2 x #6	21,500
Singlemode (SM) & Multimode (MM)					
LINDEN-SPE-7333	8-FO-4-CU-O-238-L-332	8.43	8 x MM	4 x #16	450
LINDEN-SPE-7295	2-FO-3-CU-O-266-Q-326-ORN	8.3	2 x MM	3 x #18	250
LINDEN-SPE-7332	8-FO-4-CU-Q-472-O-531-Q-610	15.5	4 x SM & 4 x MM	4 x #28	3,400
LINDEN-SPE-7127	4-FO-6-CU-Q-410-Q-760	19.3	3xSM & 1xMM	6 x #20	15,400
LINDEN-SPE-7112*	4-FO-4-CU-S-1210	30.7	2xSM + 2xMM	4 x #15	3,934

*Denotes Buoyant Design

MANY MORE DESIGNS AVAILABLE – CONTACT US



Linden Photonics, Inc.

1 Park Drive, Unit 8, Westford MA 01886
Phone: 978-392-7985
Email: info@LindenPhotonics.com
Web: www.LindenPhotonics.com