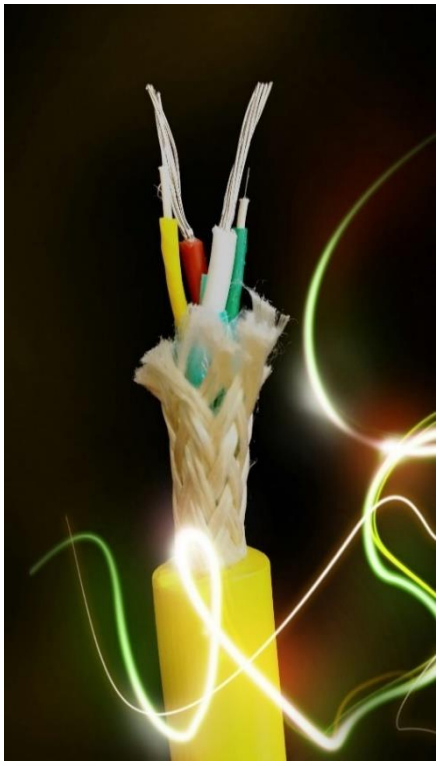
Hybrid Cables

Rugged & Durable

Buoyant

Thin & Lightweight



Hybrid Cables

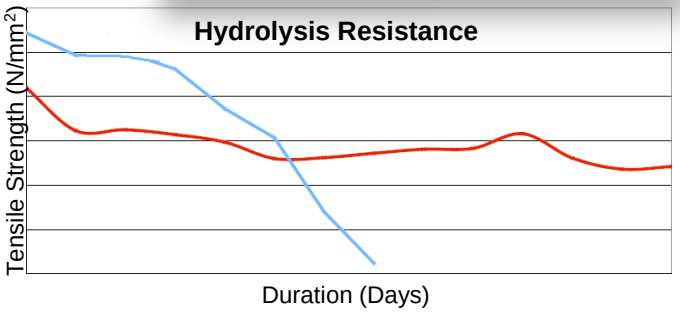
Linden Photonics **hybrid cables** combine copper and fiber elements in a **lightweight**, yet strong and robust tether cable. Linden can customize your size, buoyancy and strength; from **neutrally buoyant** designs to extremely thin cables with various conductor offerings and fiber types available. 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

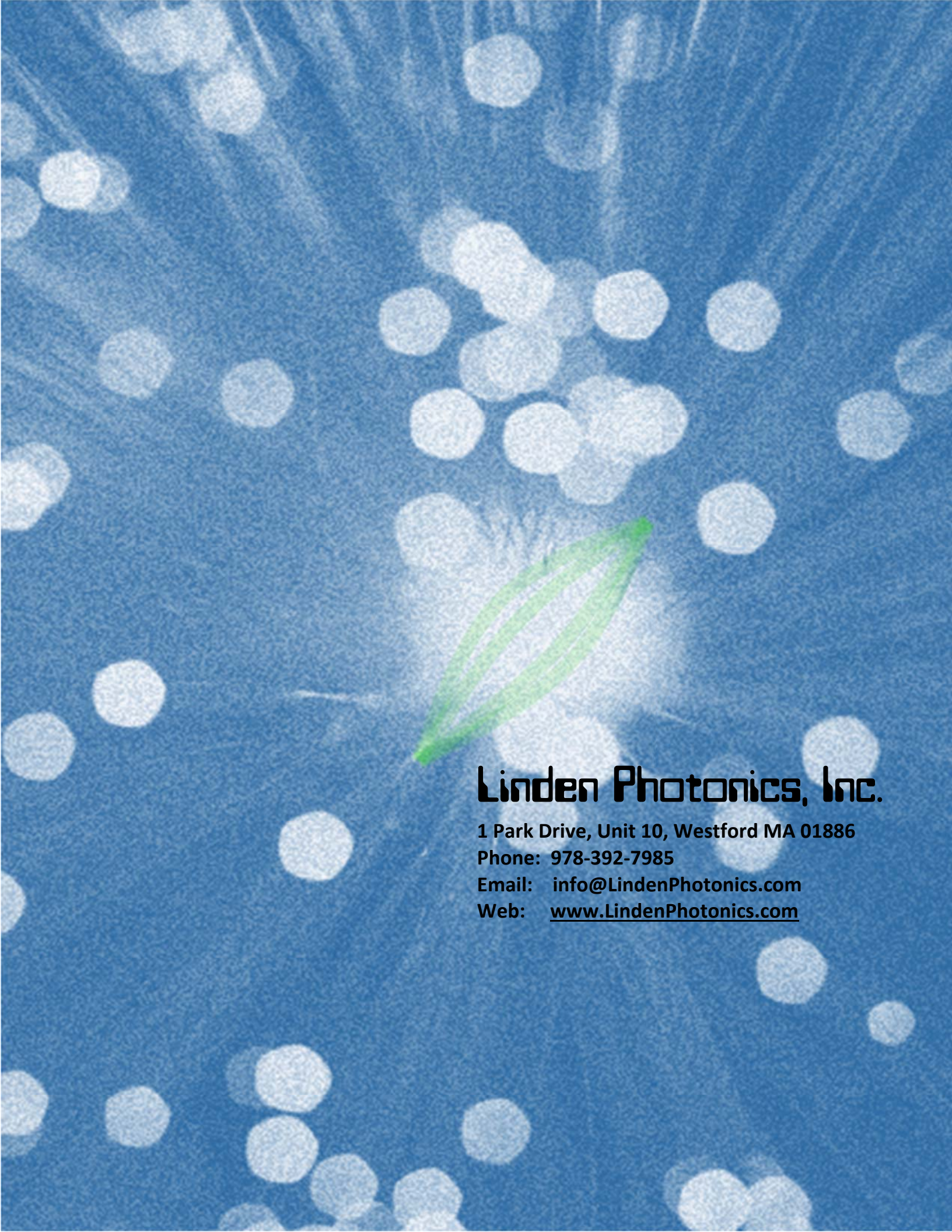
CONTACT LINDEN FOR DRAWINGS, SPECIFICATIONS OR CUSTOM REQUIREMENTS

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-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	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-Q-211-YEL	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	6.4	1 x SM	1 x #20 (TP) + #28	1,600
LINDEN-SPE-7195*	1-FO-2-CU-O-150-FQ-250	6.4	1 x SM	2 x #20	1,600
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 #24	1,600
LINDEN-SPE-7128*	1-FO-2-CU-O-312-FQ-412	11	1 x SM	2 x #22	5,000
LINDEN-SPE-7131*	1-FO-5-CU-O-260-FQ-460	12	1 x SM	5 x #18	1,100
LINDEN-SPE-7227	2-FO-6-CU-O-155-DD-470-ORN	12	2 x SM	4 x #16, 2 x #24 TP	5,000
LINDEN-SPE-7110*	1-FO-3-CU-Q-328-R-500	13	1 x SM	3 x #16	450
LINDEN-SPE-7194*	1-FO-2-CU-O-420-FQ-1036	26	1 x SM	2 x #8	1,250
Spec No.	**Part No.**	**OD (mm)**	**Fiber Type**	**Conductor**	**UTS (lbs)**
2 x Singlemode (SM)					
LINDEN-SPE-7152*	2-FO-2-CU-O-155-Q-195	5	2 x SM	2 x #24	2,100
LINDEN-SPE-7277	2-FO-2-CU-O-171-FQ-211	5.4	2 x SM	2 x #16	250
LINDEN-SPE-7107*	2-FO-2-CU-O-155-Q-235	6	2 x SM	2 x #24	2,100
LINDEN-SPE-7189*	2-FO-2-CU-O-150-FQ-278	7.1	2 x SM	2 x #20	1,600
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 + #24STP	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-7123	2-FO-2-CU-T-320-Q-400	10.2	2 x SM	2 x #14	800
LINDEN-SPE-7103	2-FO-4-CU-O-155-Q-420	10.7	2 x SM	4 x #13	1,300
LINDEN-SPE-7293	2-FO-2-CU-O-388-Q-448	11.4	2 x SM	2 x #12	4,000
LINDEN-SPE-7227	2-FO-6-CU-O-155-DD-470-ORN	12	2 x SM	4 x #16, 2 x #24 TP	5,000
LINDEN-SPE-7313	2-FO-6-CU-O-155-DD-470-ORN	12	2 x SM	4 x #16, 2 x #24 TP	5,000
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	13.6	2 x SM	4 x #16	3,200
LINDEN-SPE-7249*	2-FO-5-CU-O-55-S-65-FQ-535	13.6	2 x SM	4 x #16, 1 x #28 TP	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-7125*	2-FO-2-CU-Q-557	14.1	2 x SM	2 x #16	1,200
LINDEN-SPE-7228*	2-FO-2-CU-O-365-FQ-585	14.1	2 x SM	2 x #16	1,200

LINDEN-SPE-7233*	2-FO-2-CU-O-397-FQ-617	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-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-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	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
Spec No.	**Part No.**	**OD (mm)**	**Fiber Type**	**Conductor**	**UTS (lbs)**
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-7142*	3-FO-2-CU-O-20-Q-367	9.3	3 x SM	2 x #14	1,500
LINDEN-SPE-7160*	3-FO-2-CU-O-263-FQ-393	10	3 x SM	2 x #20	1,600
LINDEN-SPE-7166	3-FO-2-CU-O-325-Q-415-YEL	10.5	3 x SM	2 x #12	1,200
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-7237	3-FO-7-CU-O-760-Q-858	17.8	3 x SM	7 x #10	1,200
LINDEN-SPE-7113	3-FO-3-CU-O-630-DD-770	19.6	3 x SM	3 x #16	35,200
LINDEN-SPE-7231*	3-FO-4-CU-O-764-FQ-923	23.4	3 x SM	2 x #11, 1 x #20 TP	15,500
Spec No.	**Part No.**	**OD (mm)**	**Fiber Type**	**Conductor**	**UTS (lbs)**
4 x Singlemode (SM)					
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-FO-10-CU-Q-439	11.2	4 x SM	10 x #18	-
LINDEN-SPE-7124*	4-FO-4-CU-O-55-FQ-454	11.5	4 x SM LT	2 x #18	3,200
LINDEN-SPE-7163	4-FO-4-CU-O-55-S-65-Q-457	11.6	4 x SM	2 x #18 , 2 x #22	3,200
LINDEN-SPE-7199*	4-FO-4-CU-O-55-S-65-FQ-470	11.9	4 x SM	2 x #18	3,200
LINDEN-SPE-7102	4-FO-4-CU-O-155-DD-470	11.9	4 x SM	4 x #16	5,500
LINDEN-SPE-7261*	4-FO-6-CU-O-55-S-65-FQ-480	12	4 x SM (LT)	2 x #18	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	4 x SM	4 x #20	11,000
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-113-S-133-FQ-625	15.9	4 x SM	4 x #18, 1 x #22, 1 x #24	6,000
LINDEN-SPE-7276*	2-FO-6-CU-X-358-O-398-FQ-628-YEL	16	4 x SM	4 x #18, 1 x #22 STP	3,200
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
Spec No.	**Part No.**	**OD (mm)**	**Fiber Type**	**Conductor**	**UTS (lbs)**
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-285	7.2	8 x SM	4 x #20	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
Spec No.	**Part No.**	**OD (mm)**	**Fiber Type**	**Conductor**	**UTS (lbs)**
Singlemode (SM) & Multimode (MM)					
LINDEN-SPE-7295	2-FO-3-CU-O-266-Q-326-ORN	8.3	2 x MM	3 x #18	250
LINDEN-SPE-7127	4-FO-6-CU-Q-410-Q-760	19.3	3 x SM + 1 x MM	6 x #20	15,400
LINDEN-SPE-7112*	4-FO-4-CU-S-1210	30.7	2 x SM + 2 x MM	4 x #15	3,934

*Denotes Buoyant Design



Linden Photonics, Inc.

1 Park Drive, Unit 10, Westford MA 01886
Phone: 978-392-7985
Email: info@LindenPhotonics.com
Web: www.LindenPhotonics.com