



MicroTethers

Thin & Lightweight

Flexible

Power & Optics

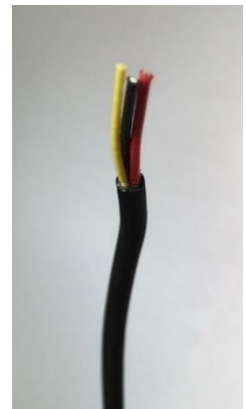


MicroTethers

Expanding upon our well-known subsea cables, Linden Photonics introduces a line of **MicroTethers** to its product line. Typically small gauge copper and fiber elements are enclosed in a **lightweight** cable designed to provide power and communications to airborne drones or aerostats. Linden can customize your size, weight and strength; from **high-strength** designs intended to provide anchoring for large aerostats in high winds to extremely thin tethers designed for the smallest of drones. Linden's expertise in low density cable jacketing is ideal for this environment. Our cables are compact and rugged; flexible and strong.

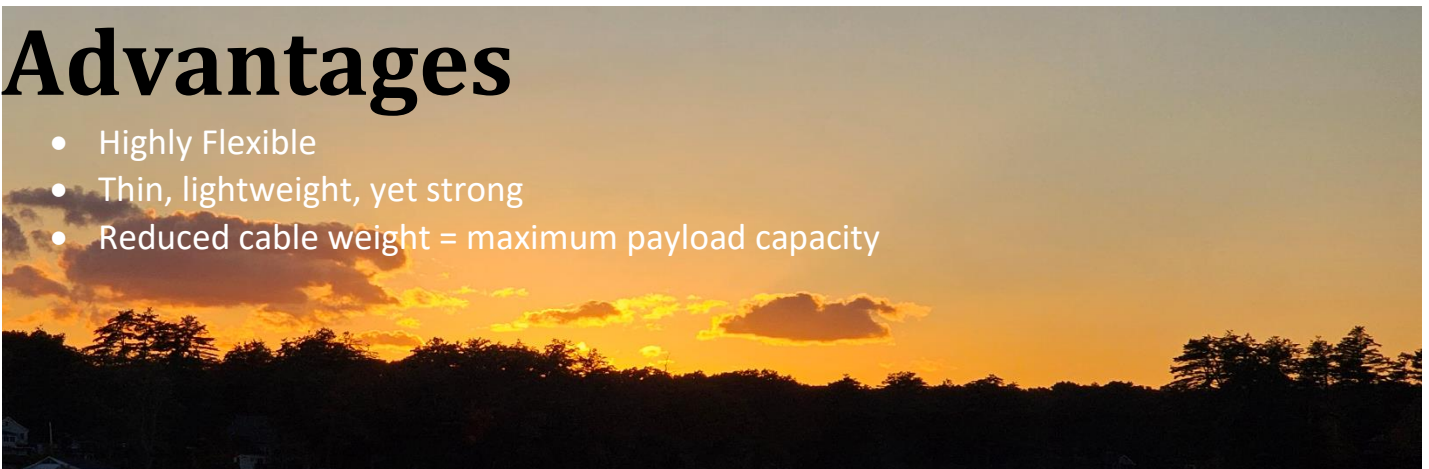
Tethered Drone Features

- **Lightweight:** Designs from 0.007lbs/ft (10.4g/m)
- Designs from 100 to 13,000 lbs work load
- 3-channels in 2.9mm OD
- Designs with or without fiber
- Various power options
- MIL M22759 Tefzel coated wire – up to 1,000V rated
- Braided or extruded jackets



Advantages

- Highly Flexible
- Thin, lightweight, yet strong
- Reduced cable weight = maximum payload capacity





Specifications

Spec No.	Part No.	OD (mm)	Fiber Type	Conductor Type	Weight (lbs/1kft)
Lightweight – Drones (fiber optic)					
LINDEN-SPE-7479	2-SM-O-70-BB-100	2.5	1 x LINDEN-SPE-7283	None	3.33
LINDEN-SPE-7513	1-FO-2-CU-O-94-BB-104	2.6	1 x LINDEN-SPE-7034	2 x 28 AWG	4.0
LINDEN-SPE-7441	1-FO-2-CU-EE-105	2.7	1 x LINDEN-SPE-7096	2 x 24 AWG	7.0
LINDEN-SPE-7565	2-FO-2-CU-BB-110	2.8	1 x LINDEN-SPE-7096	2 x 22 AWG	7.9
LINDEN-SPE-7545	1-FO-2-CU-BB-110	2.87	1 x LINDEN-SPE-7096	2 x 20 AWG	10.5
LINDEN-SPE-7459	1-FO-2-CU-EE-116	2.95	1 x LINDEN-SPE-7069	2 x 24 AWG	8.5
LINDEN-SPE-7140	1-FO-2-CU-BB-115-22759	2.9	1 x LINDEN-SPE-7096	2 x 22 AWG	7.0
LINDEN-SPE-7156	1-FO-2-CU-BB-115	2.9	1 x LINDEN-SPE-7034	2 x 24 AWG	6.0
LINDEN-SPE-7440	1-FO-4-CU-BB-115	2.9	1 x LINDEN-SPE-7096	2 x 24 AWG & 2 x 28 AWG	9.0
LINDEN-SPE-7157	1-FO-2-CU-BB-120-22759	3.0	1 x LINDEN-SPE-7043	2 x 22 AWG	8.5
LINDEN-SPE-7158	1-FO-2-CU-EE-120-22759-24	3.0	1 x LINDEN-SPE-7096	2 x 24 AWG	8.5
LINDEN-SPE-7423	2-FO-2-CU-Z-120	3.0	2 x LINDEN-SPE-7034	2 x 22 AWG	9.2
LINDEN-SPE-7437	1-FO-2-CU-BB-120	3.0	1 x LINDEN-SPE-7096	2 x 20 AWG	13.2
LINDEN-SPE-7493	1-I-2-CU-Q-120	3.0	1 x Multimode (62.5um)	2 x 24 AWG	8.5
LINDEN-SPE-7557	1-FO-2-CU-O-112-BB-122	3.1	1 x LINDEN-SPE-7034	2 x 22 AWG	10.5
LINDEN-SPE-7185	1-FO-3-CU-O-116-BB-125-22759	3.2	1 x LINDEN-SPE-7096	2 x 22 AWG & 1 x 26 AWG	8.25
LINDEN-SPE-7497	1-I-2-CU-EE-126	3.2	1 x Multimode (62.5um)	2 x 22 AWG	11
LINDEN-SPE-7186	1-FO-3-CU-O-R-116-BB-125-22759	3.2	1 x LINDEN-SPE-7096	2 x 22 AWG & 1 x 26 AWG	9.1
LINDEN-SPE-7566	2-FO-2-CU-BB-128	3.25	1 x LINDEN-SPE-7096	2 x 20 AWG	11.8
LINDEN-SPE-7187	1-FO-3-CU-O-120-BB-130-22759	3.3	1 x LINDEN-SPE-7096	2 x 20 AWG & 1 x 26 AWG	12.0
LINDEN-SPE-7215	1-FO-3-CU-O-125-BB-130-22759M	3.3	1 x LINDEN-SPE-7096	2 x 20 AWG & 1 x 26 AWG	9.5
LINDEN-SPE-7381	1-FO-4-CU-O-130	3.3	1 x LINDEN-SPE-7096	2 x 20 AWG & 2 x 28 AWG	14.7
LINDEN-SPE-7258	1-FO-3-CU-BB-133	3.4	1 x LINDEN-SPE-7096	2 x 20 AWG & 1 x 26 AWG	12.8
LINDEN-SPE-7352	1-FO-2-CU-O-100-Q-140	3.5	1 x LINDEN-SPE-7096	2 x 24 AWG	8.4
LINDEN-SPE-7535	1-FO-2-CU-O-129-BB-139	3.5	1 x LINDEN-SPE-7034	2 x 28 AWG	7.5
LINDEN-SPE-7474	2-FO-2-CU-EE-140	3.6	2 x LINDEN-SPE-7034	2 x 22 AWG	11.8
LINDEN-SPE-7335	1-FO-4-CU-BB-1245	3.7	1 x LINDEN-SPE-7034	4 x 24 AWG	10
LINDEN-SPE-7336	1-FO-4-CU-EE-150-22759-24	3.8	1 x LINDEN-SPE-7096	4 x 24 AWG	12.7
LINDEN-SPE-7421	2-FO-2-CU-BB-149	3.8	2 x LINDEN-SPE-7034	2 x 16 AWG	22.4
LINDEN-SPE-7436	1-FO-2-CU-BB-147	3.8	1 x LINDEN-SPE-7096	2 x 16 AWG	21.5
LINDEN-SPE-7439	1-FO-4-CU-BB-153	3.9	1 x LINDEN-SPE-7096	2 x 16 AWG	30.0
LINDEN-SPE-7505	3-FO-2-CU-O-144-BB-154	3.9	3 x LINDEN-SPE-7034	2 x 16 AWG	28.5
LINDEN-SPE-7559	2-FO-2-CU-O-157	4.0	2 x LINDEN-SPE-7207	2 x 26 AWG	11.5
LINDEN-SPE-7155	1-FO-2-CU-BB-160-22759	4.1	1 x LINDEN-SPE-7096	2 x 20 AWG	12
LINDEN-SPE-7183	2-FO-2-CU-BB-160-22759	4.1	2 x LINDEN-SPE-7096	2 x 20 AWG	12
LINDEN-SPE-7259	1-FO-3-CU-EE-164	4.2	1 x LINDEN-SPE-7096	2 x 20 AWG & 1 x 26 AWG	18.8
LINDEN-SPE-7315	1-FO-4-CU-O-143-R-163	4.2	1 x LINDEN-SPE-7034	2 x 20 AWG & 2 x 28 AWG	16
LINDEN-SPE-7443	2-FO-4-CU-BB-165	4.2	2 x LINDEN-SPE-7096	2 x 22 AWG & 1 x 22 AWG TP	18.5
LINDEN-SPE-7358	1-FO-2-CU-BB-170-22759	4.3	1 x LINDEN-SPE-7207	2 x 18 AWG	14.5
LINDEN-SPE-7519	2-FO-4-CU-O-156-BB-166	4.3	1 x LINDEN-SPE-7283	1 x #20 AWG STP 1 x #24 AWG STP	16
LINDEN-SPE-7181	2-FO-2-CU-EE-180-22759-24	4.6	2 x LINDEN-SPE-7034	2 x 24 AWG	7.0
LINDEN-SPE-7353	1-FO-2-CU-O-137-Q-187	4.75	1 x LINDEN-SPE-7096	2 x 20 AWG	17.5
LINDEN-SPE-7528	1-FO-2-CU-EE-200-22759	5.0	1 x LINDEN-SPE-7196	2 x 20 AWG	21.5
Lightweight – Drones (w/o fiber optic)					
LINDEN-SPE-7477	2-CU-O-86-B-96	2.4	None	2 x 24 AWG	5.8
LINDEN-SPE-7406	2-CU-BB-122-22	3.1	None	2 x 22 AWG	9.0
LINDEN-SPE-7382	2-CU-BB-122-20	3.1	None	2 x 20 AWG	13.5
LINDEN-SPE-7397	3-CU-PP-110-Q-130	3.3	None	2 x 20 AWG & 1 x 28 AWG	12.5
LINDEN-SPE-7574	2-CU-O-133-Q-133	3.4	None	2 x 20 AWG	12
LINDEN-SPE-7337	4-CU-O-120-R-140	3.6	None	2 x 24 AWG & 2 x 28 AWG	12
LINDEN-SPE-7287	2-CU-BB-145	3.7	None	2 x 22 AWG TP	10
LINDEN-SPE-7486	2-CU-BB-146	3.7	None	2 x 18 AWG	13
LINDEN-SPE-7438	2-CU-BB-147	3.8	None	2 x 16 AWG	21.4
LINDEN-SPE-7343	4-CU-BB-160	4.0	None	2 x 22 AWG & 2 x 26 AWG	10.5



Spec No.	Part No.	OD (mm)	Fiber Type	Conductor Type	Weight (lbs/1kft)
LINDEN-SPE-7517	2-CU-O-147-BB-147-BB-157	4.0	None	2 x #16 AWG	23
LINDEN-SPE-7340	2-CU-BB-165	4.2	None	2 x 18 AWG TP	17.5
LINDEN-SPE-7508	2-FO-2-CU-O-157-Z-167	4.2	None	2 x 18 AWG TP	16.7
LINDEN-SPE-7188	6-CU-Q-168	4.3	None	4 x 26 AWG + 2 x 28 AWG	15
LINDEN-SPE-7269	2-CU-EE-174	4.4	None	2 x 24 AWG	10.7
LINDEN-SPE-7380	2-CU-NN-143-R-183	4.6	None	2 x 20 AWG	16

Specifications

Spec No.	Part No.	OD (mm)	Fiber Type	Conductor Type	Weight (lbs/1kft)
Heavy Duty – Aerostat (fiber optic)					
LINDEN-SPE-7542	7096-O-135-OO-142	3.6	1 x LINDEN-SPE-7096	None	8.5
LINDEN-SPE-7338	2-SM-2-CU-O-185-BB-205	5.2	1 x LINDEN-SPE-7283	2 x 18 AWG	22.5
LINDEN-SPE-7472	4-SM-2-CU-O-185-BB-205	5.2	4 x Singlemode 2 x LINDEN-SPE-7283	2 x 18 AWG	23.6
LINDEN-SPE-7402	1-FO-2-CU-O-220	5.6	1 X LINDEN-SPE-7096	2 x 14 AWG	34.0
LINDEN-SPE-7496	4-FO-2-CU-O-192-BB-222	5.6	2 x Singlemode 1 x LINDEN-SPE-7283	2 x 18 AWG	24
LINDEN-SPE-7444	6-FO-2-CU-T-167-U-227	5.75	6 x Singlemode	2 x 20 AWG	25
LINDEN-SPE-7502	8-FO-2-CU-O-197-BB-227	5.8	8 x Singlemode (LINDEN-SPE-7267)	2 x 18 AWG	25.5
LINDEN-SPE-7174	1-FO-3-CU-O-174-Q-254	6.5	1 x LINDEN-SPE-7034	2 x 24 AWG & 1 x 26 AWG	25
LINDEN-SPE-7179	1-FO-3-CU-S-130-O-174-Q-254	6.5	1 x LINDEN-SPE-7034	2 x 24 AWG & 1 x 26 AWG	25
LINDEN-SPE-7232	2-FO-3-CU-S-130-O-191-Q-257	6.5	2 x LINDEN-SPE-7034	2 x 24 AWG & 1 x 26 AWG	27
LINDEN-SPE-7499	4-FO-2-CU-O-265-B-315	8.0	4 x Singlemode 2 x LINDEN-SPE-7283	2 x 24 AWG	83
LINDEN-SPE-7525	4-FO-2-CU-O-226-OO-318	8.1	2 x LINDEN-SPE-7283	2 x 24 AWG	56
LINDEN-SPE-7426	2-FO-2-CU-O-229-FQ-329	8.35	1 x LINDEN-SPE-7283	2 x 20 AWG	37
LINDEN-SPE-7452	1-FO-2-CU-O-270-S-330	8.4	1 x LINDEN-SPE-7260	2 x 12 AWG	100
LINDEN-SPE-7453	1-FO-2-CU-O-280-S-340	8.6	4 x LINDEN-SPE-7260	2 x 12 AWG	69
LINDEN-SPE-7289	4-FO-P-140-O-308-OO-349	8.8	4 x LINDEN-SPE-7096	None	57
LINDEN-SPE-7482	1-FO-2-CU-O-289-EE-349	8.9	1 x LINDEN-SPE-7098	2 x 12 AWG	72
LINDEN-SPE-7314	2-FO-4-CU-O-320-U-390-BLK	9.9	2 x LINDEN-SPE-7043	4 x 22 AWG	60
LINDEN-SPE-7323	2-FO-2-CU-S-122-T-425-00-465	12.4	1 x LINDEN-SPE-7283	2 x 20 AWG	65
LINDEN-SPE-7476	1-FO-4-CU-P-270-O-411-B-491	12.5	2 x Singlemode 1 x LINDEN-SPE-7265	2 x 16 AWG TP	109
LINDEN-SPE-7341	2-FO-2-CU-NN-216-T-422-B-520	13.2	1 X LINDEN-SPE-7283	2 x 16 AWG	94
LINDEN-SPE-7109	2-FO-5-CU-O-155-Q-550	13.9	2 x LINDEN-SPE-7034	5 x 16 AWG	138
Heavy Duty – Aerostat (w/o fiber optic)					
LINDEN-SPE-7278	4-CU-T-181-OO-197	5.0	None	4 x 22 AWG	20.0
LINDEN-SPE-7270	2-CU-EE-253	6.4	None	2 x 24 AWG	12.7
LINDEN-SPE-7279	6-CU-T-300-OO-316	8.0	None	3 x 24 STP & 3 x 24 TRPL	52
LINDEN-SPE-7454	4-CU-O-270-S-330	8.4	None	2 x 22 AWG STP	74
LINDEN-SPE-7342	2-CU-O-270-S-330	8.4	None	2 x 12 AWG	67
LINDEN-SPE-7488	6-CU-O-276-EE-336	8.5	None	2 x 12 AWG & 2 x 22 AWG TP	73
LINDEN-SPE-7475	4-CU-P-237-O-390-B-470	12.0	None	2 x 22 AWG TP	104

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