# Mission Specialist Tether Comparison Sheet

### **FIBER OPTIC**

**Diameter:** 4.5 mm (0.18 in)

**Buoyancy:** ~ Neutral (-2/-3kg/km seawater weight)

Breaking Strength: 300 kg (660 lb)

Recommended Maximum Length: 2 km (~6,500 ft)

Bandwidth: 1 Gbps, 100 Mbps (depending on vehicle module)

## **EXPEDITIONARY COPPER**

**Diameter:** 4.2mm (0.17 in)

**Buoyancy:** Neutral (-2/-3 kg/km seawater weight)

Breaking Strength: 170 kg (375 lb)

Recommended Maximum Length: 600 m (1,969 ft)

Bandwidth: 60 Mbps







**Diameter:** 12.0 - 17.0 mm (0.47 - 0.67 in)

Buoyancy: Negative (-8/-10 kg/km seawater weight)

Breaking Strength: 730kg (1,600 lb)

Recommended Maximum Length: 600m (1,969 ft)

Bandwidth: 1 Gbps, 100 Mbps (depending on vehicle module)



#### PERFORMANCE / PPT - COPPER

**Diameter:** 9-10 mm (0.35-0.39 in)

**Buoyancy:** Neutral

Breaking Strength: 635 kg (1,400lb)

Recommended Maximum Length: 450 m (1,476 ft)

Bandwidth: 60 Mbps (Up to 300m)



# **NEUTRAL - COPPER**

**Diameter:** 11.7 mm (0.46 in)

**Buoyancy:** Neutral

Breaking Strength: 457 kg (1,007 lb)

Recommended Maximum Length: 400 m (1,312 ft)

Bandwidth: 60 Mbps (Up to 300 m)



#### **NEGATIVE - COPPER**

**Diameter:** 7.62 mm (0.3 in)

**Buoyancy:** Negative

Breaking Strength: 457 kg (1,007lb)

Recommended Maximum Length: 400 m (1,312 ft)

Bandwidth: 60 Mbps (Up to 300 m)



Standard minimum for bend radius at 20 times diameter per tether.