The R70/R80D Tether Kit enables continuous operation of the aircraft and attached payloads in support of multiple mission sets.

The Tether Kit consists of a detachable harness/power converter, battery replacement modules, and interfaces with off-the-shelf ground stations (Elistair Safe-T shown). Should a loss of tether power occur, the system will warn the operator and continue to fly on internal batteries until a low-power condition triggers either an automatic descent to a safe AGL altitude, or a safe auto-land. Highly transportable, the Tether Kit is designed for use in austere environments. The system provides aircraft power at elevations approaching 130m AGL across a range of environmental conditions and may be installed or removed from the aircraft in the field within 5 minutes.

**CONTINUOUS AIRCRAFT OPERATION FOR R70 & R80D**

**FLIR Tether Kit**

The R70/R80D Tether Kit enables continuous operation of the aircraft and attached payloads in support of multiple mission sets.

The Tether Kit consists of a detachable harness/power converter, battery replacement modules, and interfaces with off-the-shelf ground stations (Elistair Safe-T shown). Should a loss of tether power occur, the system will warn the operator and continue to fly on internal batteries until a low-power condition triggers either an automatic descent to a safe AGL altitude, or a safe auto-land. Highly transportable, the Tether Kit is designed for use in austere environments. The system provides aircraft power at elevations approaching 130m AGL across a range of environmental conditions and may be installed or removed from the aircraft in the field within 5 minutes.

**FEATURES**

CONTINUOUS POWER TO AIRCRAFT AND PAYLOADS
Flight durations of 24 hours for continuous mission support.

RAPID RECONFIGURATION BETWEEN FLIGHT MODES
Modularity permits conversion between free flying and tethered modes in minutes.

SUPPORT FOR R70/R80D AND THIRD PARTY PAYLOADS
Wide range of possible mission sets: use either FLIR payloads or your own application-specific payload enabled by the Payload Development Kit (PDK).

**APPLICATIONS**

SUSTAINED ISR
AIRBORNE COMMS RELAY
SITUATIONAL AWARENESS
EVENT OVERWATCH
TARGETING
FORCE PROTECTION
CRITICAL INFRASTRUCTURE PROTECTION
BORDER SECURITY
SPECIFICATIONS

Tether Length | 130m (426 ft)  
Range of Motion | Lateral translation 25m (80 ft)  
                 | Yaw rotations: 10x each direction  
Max Ceiling | 2000m (6500 ft) MSL  
Wind Tolerance | See Figure 1  
Ground Station Velocity | Fixed location  
Flight Duration | 24 hours*  
Environmental Tolerance | IP54  
Operating Temperature | -10 °C to 40 °C (14 °F to 104 °F)  
Power | 120V/60Hz or 230V/50Hz  

* Dependent on environmental conditions.

Battery replacement modules replace two of four aircraft batteries.