

SKIDER for Radiation Monitoring

Linecard – Mirion SPIR-Explorer on drones and robots

From the sensor to the analyst – in real time

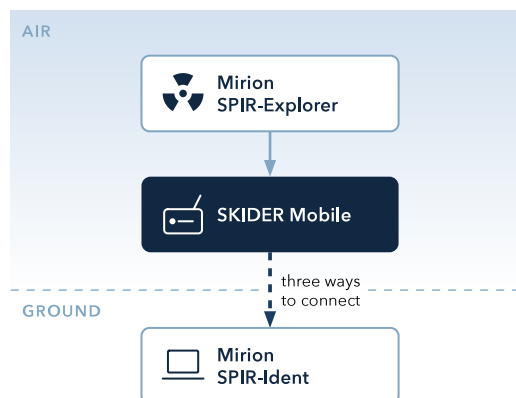
The challenge

Around nuclear sites, after incidents and in CBRN operations, people have to stay away from the radiation source. Drones and robots go where the risk is – and the infrastructure on site cannot be relied on.

A measurement is only useful with its position and time, and only when it reaches the analyst.

What SKIDER does

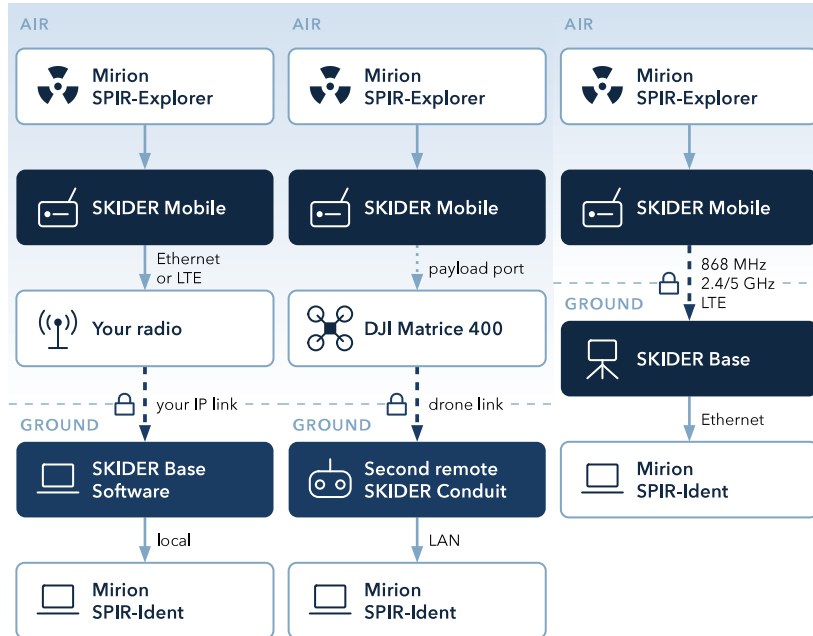
- Enriches every Mirion SPIR-Explorer measurement with position, time and altitude
- Buffers all data onboard – nothing is lost when the link drops, everything is delivered after reconnect
- Forwards measurements in real time to Mirion SPIR-Ident
- Carries and powers the SPIR-Explorer on the drone or robot – with its own battery or from the platform's supply
- **Georeferenced** – every measurement with position, time and altitude (GPS, Galileo, GLONASS, BeiDou)
- **Lossless** – onboard buffering across link outages
- **Real time** – straight into Mirion SPIR-Ident
- **Three ways to connect** – your link, the drone's link, or SKIDER's own radios



One data path from sensor to analysis – and three ways to connect.

	SKIDER Mobile IP	SKIDER Mobile for DJI M400	SKIDER Mobile + Base
Platform	drone, vehicle or robot	DJI Matrice 400	drone, vehicle or robot
Mounting	DJI kits, generic mount, custom engineering	payload port, under the drone	as SKIDER Mobile IP
Power	own battery or platform supply	from the drone	own battery or platform supply
Data link	your IP link or LTE	the drone's own link	SKIDER multi-link radios
Ground side	SKIDER Base Software on a laptop	SKIDER Conduit, second remote	SKIDER Base
Positioning	SKIDER GNSS or platform (MAVLink, NMEA)	from the aircraft	as SKIDER Mobile IP
Security	optional encryption, WireGuard VPN	optional end-to-end encryption	optional encryption, WireGuard VPN
Best for	own radios, cellular coverage	M400 fleets, no extra radio	no infrastructure on site

One data path, three links

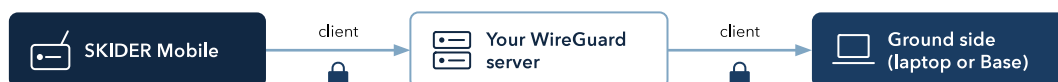


Solid: cable. Dashed: radio. Dotted: DJI platform. Lock icon: Encrypted. Open lock icon: Encryption optional.

Encrypted links – two setups

SKIDER Mobile IP and SKIDER Mobile + Base can encrypt the link with WireGuard VPN technology, set up in one of two ways:

Shared server. SKIDER Mobile and the ground side both connect as clients to your WireGuard server. Neither side needs a public IP address.



Peer-to-peer. SKIDER Mobile and the ground side connect directly. One side needs a public IP address.



Which setup fits your mission? Talk to us.