Table 2. Typical System Trade Considerations for Border Security Applications

Security Tasking	Area Coverage	Coverage Rate	DRI Requirement	SWaP	Cost
Event Detection	• Very Wide • Up to 360-°Az/El • Very broad detection range capabilities	Very high, up to instantaneous with multiple sensors	**Detection,** above minimum detection threshold	**Lowest** SWaP to cover largest areas in depth	Low
Perimeter Detection	• Wide Area • Well defined detection range limitations	100% perimeter coverage, trading off individual sensor capabilities for number of sensors	**Detection,** typically for a specific target type (vehicle or personnel)	**Limited** SWaP to cover large perimeters	Low
Intrusion Detection	• Limited Area	Defined by sensor Coverage Rate and Target Speed	**Recognition,** of Personnel and Vehicles	**Higher** SWaP due to limited areas covered	Moderate
Threat Identification	• Very Limited	Slow or fixed-point coverage with limited slewing capability	**Identification,** of Personnel and Vehicles	**Highest** SWaP to perform identification in limited situations	Highest