SHYAM
VNL

MA-CHAKRA

Tactical Mobile Identity Catcher/Presence Detector & Secure Communication System

Urban

Rural

Designed & Made in India

MA-CHAKRA is a cutting-edge and all-encompassing solution designed to aid Law Enforcement Agencies in effectively maintaining order during riots, mass demonstrations, and similar public events. This system provides various crucial services that enable the management of such situations efficiently, such as:-

1. Cellular identity detection during mass gatherings, in areas, buildings.

2. Presence detection of predefined targets,

3. Denial of services for all cellular devices in the target area

4. Provide Secure mobile broadband communication for tactical team

5. Advanced analytics with data visualisation

MA-CHAKRA enables the acquisition of GSM, UMTS, LTE cellular devices, as well as detection and alert of predefined targets with denial of operator services.

Ideal solution for Anti-Corruption, Police Special Ops, Border Protection, Counter Terrorism, Intelligence Services, Military Intelligence & Prisons.

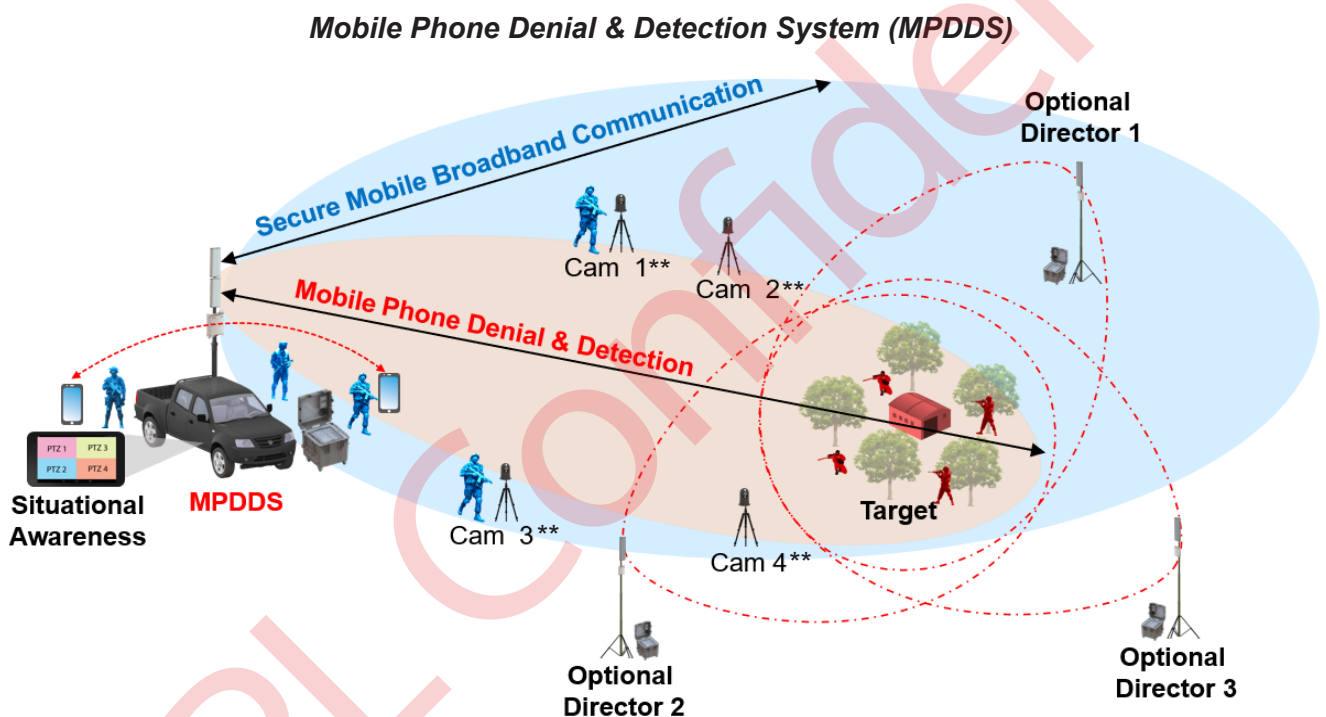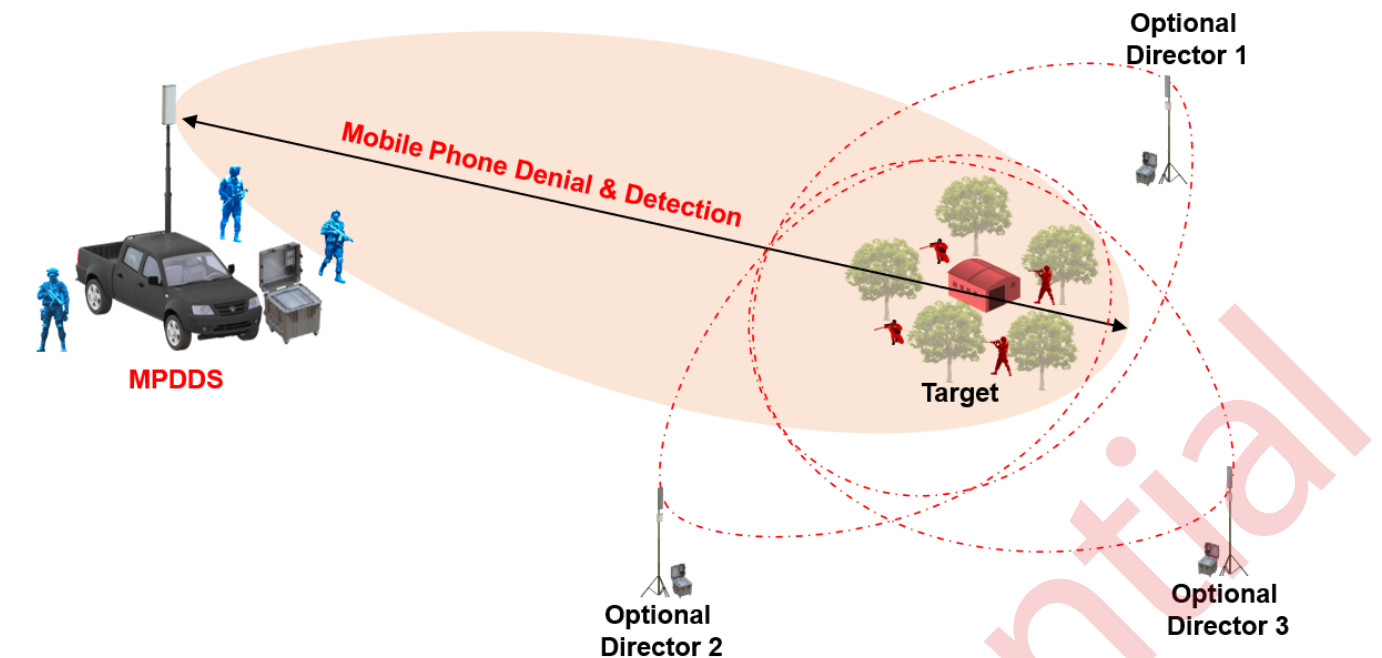Available Configurations: Tactical Case, Tripod, Vehicle, Helicopter mount.

Cellular Service Denial & Detection System with Live Surveillance

BENEFITS

- Surveillance target confirmation and acquisition
- Cellular location detection
- No dependency on public networks
- Private Secure communication network
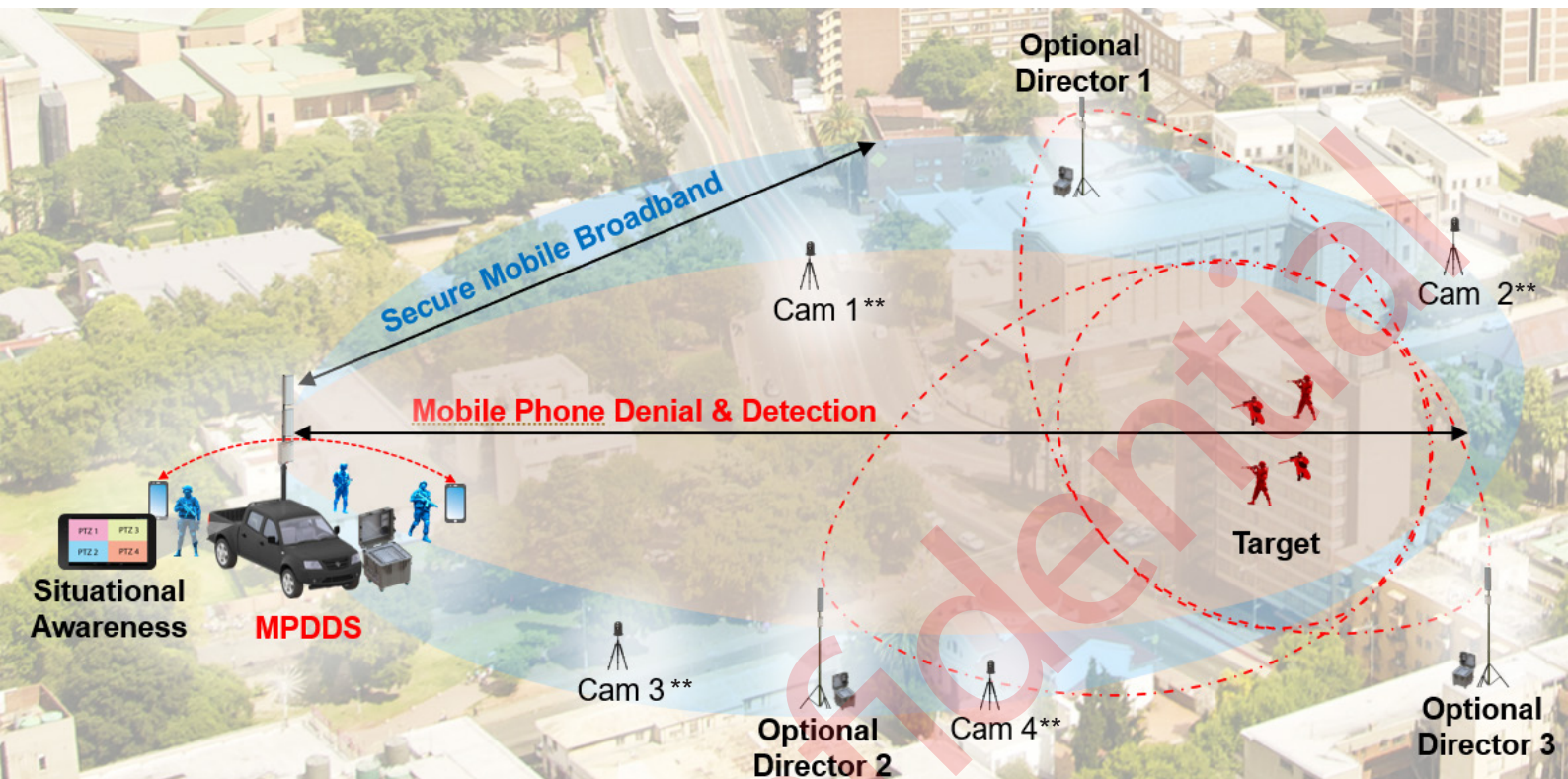- Powerful analytic software with data visualization

HIGHLIGHTS

- Detect any Mobile Phone; Idle, Active or Data Call
- Detect 2G, 3G, 4G, 5G (NSA) mobile phones
- Upgradable frequency bands
- Private secure voice, video & data communication
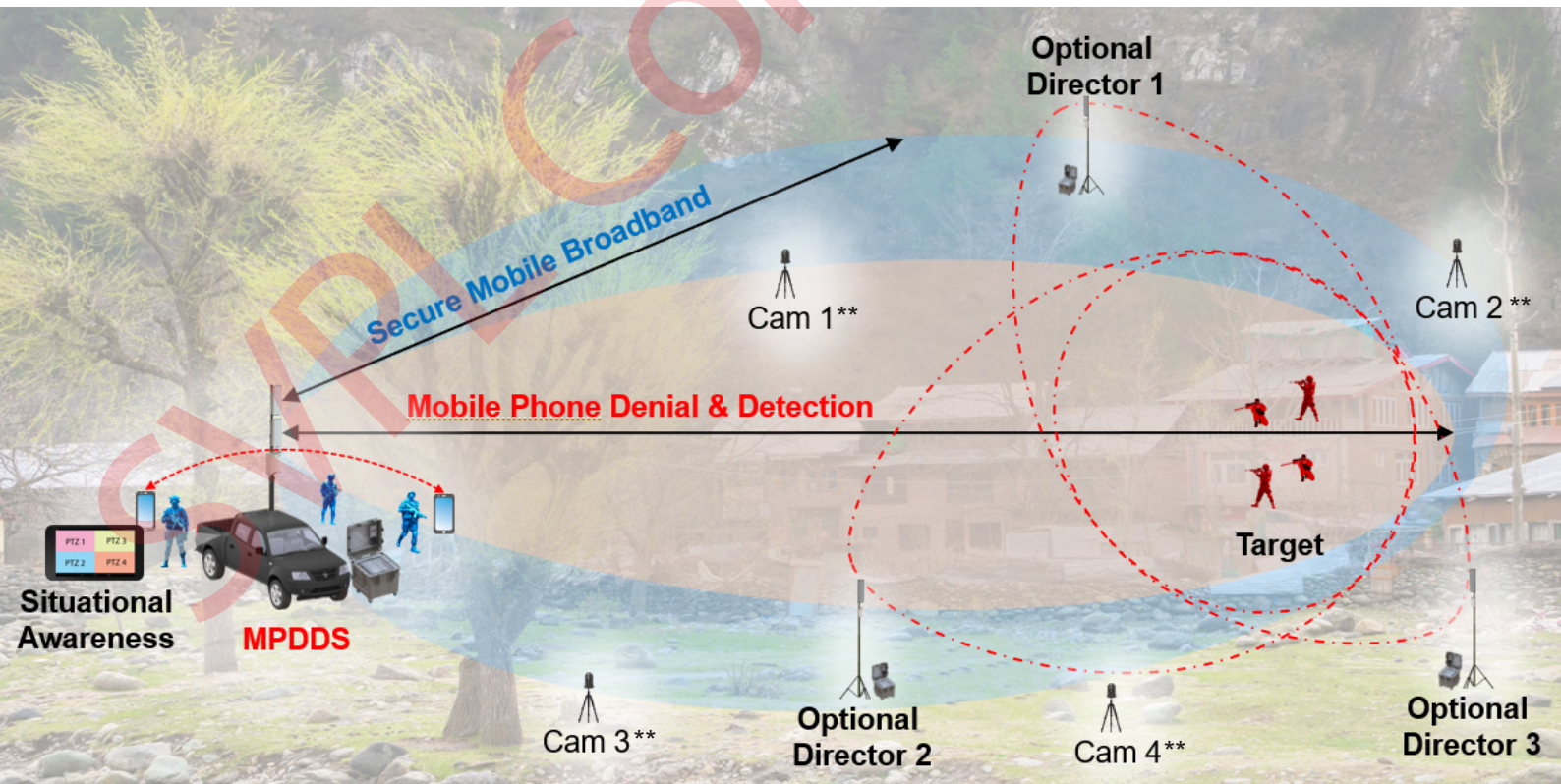- Video Surveillance & Situational Awareness **(SA)**

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Mobile Phone Denial & Detection System (MPDDS)

MPDDS with Secure mobile broadband communication for security forces

CAPABILITIES:

1. **Identity Catching** - Detects Unique Identifiers of the registered cellular devices in the disaster area.

2. **Detect presence within minutes of multiple freq bands & technologies.** 2G, 3G, 4G & 5G & Wi-Fi (optional)

3. **Presence Detection** - Generate automatic alerts upon detection of predefined targets. These targets are managed by the user.

4. **Video streming and video surveillance** with 4G/LTE based PTZ HD camera.

5. **Exact Location finding of the Target** *(Last Mile Positioning)* - using CDL (Cellular Device Locator) the exact location of the target can be found within 1 meter accuracy, by security team.

6. **Powerful analytics** with data Import & Export facility with interfaces for other tools for Big Data Analysis & getting high value intelligence.

7. **Private Secure communication network** - A private & secure cellular network independent of public network exclusively for tactical team.

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Application in Urban Areas:
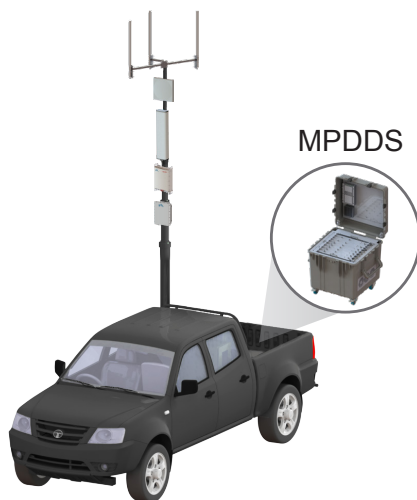*MPDDS with Secure mobile broadband communication for security forces*

Application in Rural Areas:
MPDDS with Secure mobile broadband communication for security forces

**PTZ Camera

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A. MPDDS with Private Secure Communications

MPDDS

The unit consists of multiband multi technology modules which denies and detects all mobile in the area of operation.

It enables the acquisition of GSM, UMTS, LTE cellular devices as well as specific pre-defined targets.

The tactical network core solution, with its wide-range coverage, provides communication, real time, secure transmission of voice and data exchange.

B. Commander's Kit

Control Station produces a unified operating image for the unit commander using a dedicated private tactical GSM & LTE network, with clear video feeds and other data interchange formats, allowing quick and precise decision-making. It provides a composite video feed from all live cameras within the restricted area and Blue Force Tracking data for real-time situational monitoring.
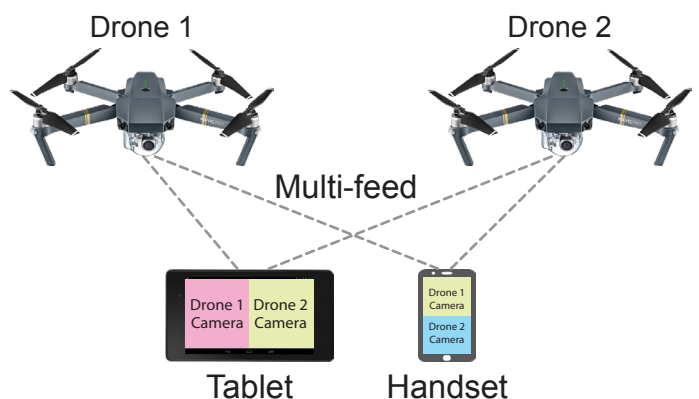
C. Ground Video Surveillance Kit

PTZ Camera

Tablet

Power Pack, 330W

A visual surveillance layer for possible escape routes is added via covert fixed EO sensors, with feed relayed directly to the unit commander.

These sensors are remotely managed based on sensitive and advanced motion detection, with an auto-pan/ tilt and zoom feature that facilitates accurate spotting of a target's movement at identified escape routes.

D. Video Surveillance on Drone - *3rd Party*

Drone 1   Drone 2

Multi-feed

Tablet   Handset

Traditional Drone Camera output is seen by only the Drone operator.

The Live feed can not be fed to multiple users, neither in the field nor in the command centre. Which has been a big bottleneck.

VNL Secure Mobile Broadband System solves the above problem as live Multiple Drone camera feeds can be seen by the designated field-agents.

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Private Secure Voice, Video & Data Communication Features:

- PTT (push to talk)
- PTV (push to video)
- 6 party audio conference
- 6 party video conference
- Audio, Video Call
- 1-to-1 & group instant messaging
- Instant file sharing
- Power savings Light/dark theme
- Location tracking and logs
- User friendly management dashboard
- Man Down
- Configurable AES Encryption
- Online/offline Presence
- User Group Management

- Secure & reliable tactical communication
- Real-time situation awareness with cameras & geo-location
- All weather design for smooth operation
- Interoperability between agencies & platforms
- Compact, lightweight & flexible deployments
- Works standalone or in a network

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THE PROCESS FLOW

1. **Detecting the persons in the event area**

2. **The unique mobile identity of the person in the event area**

3. **Alert is raised if blacklisted person adentified in the event area**

4. **Real-time info/alert shared with HQ/local console**

SYSTEM REAL-TIME REPORT OF MOBILE PHONES

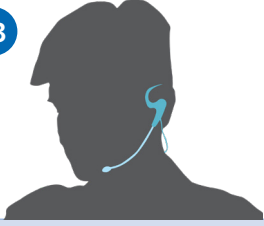| Detected Mobile Information					Blacklist	■ —
Date	Time	Operator	IMSI	IMEI	Target	Tech
xx-xx-xx	8:42:15	Airtel-DL (India)	40410054710XXXX	NA	Detected	4G
xx-xx-xx	9:12:22	JIO-DL (India)	40585615813XXXX	NA	Detected	4G
xx-xx-xx	10:10:12	BSNL-HR (India)	40468550861XXXX	86256303645XXXX	Detected	2G
xx-xx-xx	10:34:28	Airtel-DL (India)	40410053342XXXX	NA	Detected	4G
xx-xx-xx	11:54:18	Etisalat (Nigeria)	42402101326XXXX	35425581605XXXX	Detected	2G
xx-xx-xx	13:02:20	VI-DL (India)	40411220178XXXX	35332010073XXXX	Officer 1	2G
xx-xx-xx	13:02:30	Airtel-DL (India)	4041005471XXXX	35693709733XXXX	Detected	2G
xx-xx-xx	13:03:20	JIO-DL (India)	40587208895XXXX	NA	Detected	4G
xx-xx-xx	13:04:02	Etisalat (Nigeria)	42402141679XXXX	35590009113XXXX	Detected	2G
xx-xx-xx	13:16:07	Wataniya (Kuwait)	41903101707XXXX	86057003287XXXX	Detected	2G
xx-xx-xx	13:28:12	JIO-DL (India)	40587208895XXXX	86523004066XXXX	Detected	2G
xx-xx-xx	13:44:17	Beeline (Russia)	40101568039XXXX	NA	Detected	4G
xx-xx-xx	13:52:22	JIO-DL (India)	4058720889XXXX	86530004257XXXX	Officer 2	2G
xx-xx-xx	14:04:27	Banglalink (Bangladesh)	47003600284XXXX	35858042128XXXX	Detected	2G
xx-xx-xx	14:16:32	Proximus (Belgium)	20601801638XXXX	NA	Detected	4G
xx-xx-xx	14:28:37	Airtel-DL (India)	40410054802XXXX	NA	Detected	4G
xx-xx-xx	14:30:42	Airtel-DL (India)	40410054802XXXX	NA	Detected	4G
xx-xx-xx	14:42:47	Du (Dubai)	42403026444XXXX	86644805271XXXX	Detected	2G
xx-xx-xx	15:14:52	Airtel-DL (India)	40410054802XXXX	NA	Officer 3	4G
xx-xx-xx	15:16:57	China Unicom (China)	46006511620XXXX	NA	Detected	4G

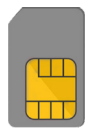|	
XXXXX	Detected *illegal* Phones of Indian Operators
XXXXX	Detected *illegal* Phones of **Foreign** Operators
XXXXX	Detected Phones of **Authorized Govt. Officials**

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Optional Items

WRISTBAND PHONE HOLDER	SMARTPHONE CHEST MOUNT	WIRED MONO SINGLE HEADSET, WITH MIC	TABLET
01	02	03	04
Wristband Phone Holder	Smartphone Chest Mount	Wired Mono Single Headset, with MIC	Tablet with Ruggedized Case

MOBILE HANDSET	CONTROL STATION	LAPTOP	LTE SECURE BACKHAUL
05	06	07	08
Mobile Handset with Ruggedized Case	Tactical Control Station (C2i)	Laptop, i7, 16GB	Multiband LTE Secure Back-haul Kit

MICROWAVE RADIO	HAND CRANKED MAST	VEHICLE PNEUMATIC MAST	POWER PACK
09	10	11	12
Microwave Radio with Integrated Antenna	Hand Cranked 3-Section Mast, 4 m	Vehicle Mounted Pneumatic Mast, 6 m	Power Pack, 330 W

POWER PACK	PTZ CAMERA	SIM CARD	SIM CARD PROGRAMMER
13	14	15	16
Power Pack, 1,000 W	PTZ Camera with Stand	SIM Card Kit	SIM Programmer Kit

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For further information visit our website www.shyamvnl.com

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