STANDARD MIL-STD 810

STANDARD MIL-STD 1472

STANDARD MIL-STD 461

Other Sizes: 0.74m up to 1.2m

PKA SERIES

The PKA Series ensures critical communication when terrestrial networks fail. Its intelligent Autoswitch SATELLITE+GSM Hybrid system continuously monitors 4G/5G and automatically switches to the satellite the moment the ground connection drops—guaranteeitng zero data interruption.

One Touch and Live

The PKA Series features dual-transceiver support for Newtec, Hughes and any state of art modems modem platforms, with models PKA-74/98/120 (Hughes) and PKA-74/98/120 (Newtec). Its advanced IP Router includes dual Nano-SIM/eSIM for global cellular failover and local network management. Paired with the PAC-500 controller and "One Touch and Live" auto-acquisition, it delivers instant satellite lock and unbreakable connectivity in under two minutes.

Install Quickly

Lightweight and ultra-durable, the PKA Series installs quickly with vehicle-specific mounting. Its intelligent PAC-500 controller and high-gain reflector deliver a powerful, reliable link, fully manageable via controller, smartphone, or web browser from anywhere.

Key Features

- One-Touch Operation

- Optional 4G / 5G /LTE supported modem for load balancing and bonding solutios

- Fully motorized driving mechanism with zero backlash gear system

- Prime Focus antenna and feed system

- Easy vehicle integration

- Manual drive tool kit for emergency situations

- De-Ice Systems (Optional)

- Supports OpenAmip

- Supports all modems

- Easy to install and refit

TECHNICAL SPECIFICATIONS / PKA SERIES

GENERAL SPECIFICATIONS

GENERAL SPECIFICATIONS	PKA-74	PKA-98	PKA-120
Reflector Diameter	0.74m	0.98m	1.20m
Reflector Type	Elliptical	Elliptical	Prime Focus
Reflector Material	Steel	SMC / Carbon-Fiber	SMC / Carbon-Fiber
Platform Geometry	EL over AZ	EL over AZ	EL over AZ
Deployment Sensors	GPS antenna, Compass ± 2º	GPS antenna, Compass ± 2º	GPS antenna, Compass ± 2º
Antenna Travel AZ	360°	± 200º	± 200º
Antenna Travel EL	0 - 90°	0º to 90º	0º to 90º
Polarization	Circular, Auto-switching (RH or LH)	Circular, Auto-switching (RH or LH)	± 45º (LH/RH CP)
Deploy Speed AZ	Variable, 10°/sec typ.	Variable, 10°/sec typ.	2°/sec
Deploy Speed EL	Variable, 10°/sec typ	Variable, 10°/sec typ	6°/sec
Peaking Speed	0.1°/sec	0.1°/sec	0.2°/sec

RF CHARACTERISTIC

RF CHARACTERISTIC	TX	RX
Frequency (GHz)	28.44 - 30.00	17.30 - 20.20 (3W-XRE)
	29.00 - 30.00	17.80 - 20.20 (3W-XRE)
	29.00 - 30.00	17.70 - 20.20 (Konnect 3W-XRF)
	29.00 - 30.00	18.10 - 20.20 (3W - TRX012 Optional)
	29.00 - 30.00	17.70 - 20.20 (4W - AN8025 Optional)
	28.10 - 29.10	17.70 - 20.20 (4W - AN8023 Optional)
	29.20 -31.00	19.40 - 21.20 (2 Port CP feed Optional)

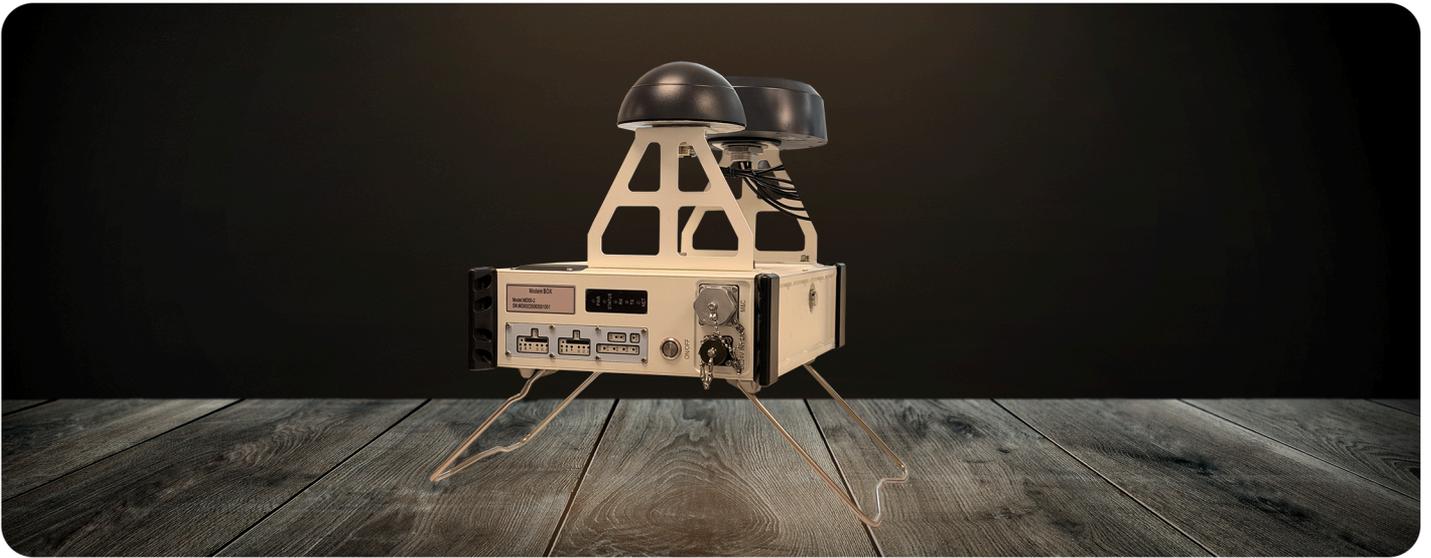|	PKA-74	PKA-98	PKA-120
Midband Gain (+-0.5 dBi /± 0.2 dBi) Tx	45.3 @29.0 GHz	46.60 @29.75GHz	49.9 @ 29.75Ghz
Midband Gain (+-0.5 dBi /± 0.2 dBi) Tx	41.6 @19.2 GHz	43.50 @19.75 GHz	46.5 @19.75Ghz
Antenna Noise Temperatur (K)	30° EL= 50 Max.	30° EL= 62 Max.	20° EL= 107/ 40° = 89
Feed Interface	Circular		

ENVIRONMENTAL SPECIFICATIONS

ENVIRONMENTAL SPECIFICATIONS	PKA-74	PKA-98	PKA-120
Temperature Range Operational	-30°C to 55°C	-30°C to 55°C	-30°C to 55°C
Temperature Range Survival	-40°C to 60°C	-40°C to 60°C	-40°C to 60°C
Wind Speed Operational	95 km/h	80 km/h	72 km/h
Wind Speed Survival	140 km/h	140 km/h	130 km/h
Wind Speed Stowed	< 175 km/h	< 175 km/h	< 175 km/h
Rain	Survival in heavy rainstorm (IP65)	Survival in heavy rainstorm (IP65)	Survival in heavy rainstorm (IP65)
Solar Radiation	1000 W/m2	1000 W/m2	1000 W/m2
Humidity	0 to 100% with condensation	0 to 100% with condensation	0 to 100% with condensation

MECHANICAL SPECIFICATIONS

MECHANICAL SPECIFICATIONS	Azimuth	Elevation
Drive Rates Slow	0.4° / sec	0.1° / sec
Drive Rates Medium	2.5° / sec	1.5° / sec
Drive Rates Fast	4.5° / sec	3.0° / sec
Antenna Travels	± 360°	Up to 90°

Specifications are subject to change.

One Touch and Live

The PALS MR-1200 is a versatile communications hub bridging legacy and next-generation networks. It supports satellite, LTE/4G/5G, wired, and Wi-Fi connectivity, with internal integration for Newtec, Hughes, and any state-of-art modems. Built-in GPS and dual SIM/eSIM support ensure seamless, uninterrupted connectivity anywhere.

Adaptable & Intelligent Design

Available in three form factors—Portable Handheld, Supported Upright, and Rack Mount—it adapts to any operational environment. Featuring Wi-Fi 5, Gigabit Ethernet, and load balancing, the MR-1200 runs on RutOS for industrial IoT protocols and secure VPN connectivity.

Complete Remote Management

The system provides full remote monitoring via smartphones and tablets, and integrates with PALS Vision NMS for centralized network oversight. Ideal for broadcasting, emergency response, and remote operations, the MR-1200 is the resilient, intelligent hub for mission-critical communications.

Key Features

- Integrated satellite modem
- Integrated Routing RUTX12
- Flexible Networking, LAN & OpenAMIP
- GPS positioning access
- Dual SIM & Enhanced LTE Support
- Dual-Band Wi-Fi
- High Durability
- High-Speed Throughput
- Dual, Nano-SIM and e-SIM support

MECHANICAL SPECIFICATIONS	MR-1200
Modem	Newtec, Hughes, iDirect, Comtech Modems
Function	Supporting LTE1 Antenna *2, Supporting LTE2 Antenna
	*2 Supporting Wifi Antenna *2, Built-in GPS positioning function
Interface	Power in Plug*1, Power out Plug*1, LAN RJ45 Plug*1 Open AMIP RJ45 Plug*1, Debugging/Commossion Plug*1
Weight	≤4.5kg