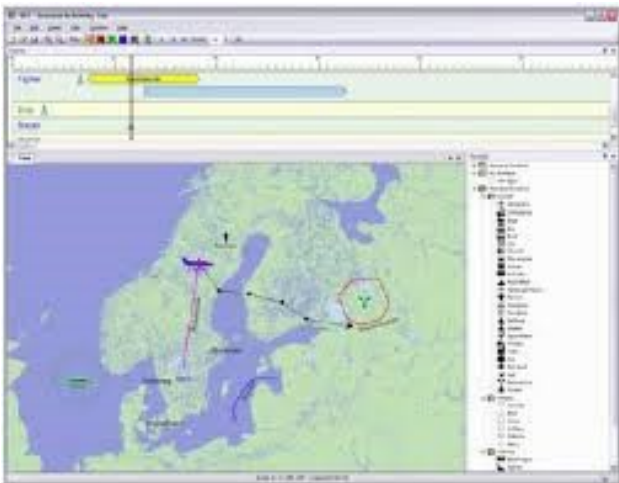


Comrod Automatic Payload Alignment Systems (CAPAS) enables quick and effective deployment of communication or sensor assets without exposing personnel to unnecessary danger.

The CAPAS-RT Rotator Tilt System accomplishes this by enabling computer controlled tilt and rotation for payloads. The compact design allows the system to be used in a wide range of applications, and the rotator itself does not require a rotary joint for continuous rotation.

CAPAS-RT supports both closed loop and open loop alignment, and allows a combination of both. In closed loop alignment mode the system is controlled by a radio transceiver to optimize received signal strength or minimize bit error rate. In open loop alignment mode the system is controlled by the Comrod Integrated Mission Planning System. The powerful drive system coupled with the integrated magnetic or optional GPS compass allows fast and accurate positioning of payloads demanding better than 1.5 degrees pointing accuracy. Closed loop feedback from the radio can optimize the alignment within a fraction of a degree.

The CAPAS-RT System is fully rugged per MIL-STD-810, and is suitable for a wide variety of tactical masts.



Screenshots of the integrated mission planning application showing the time based geographical network planning. (www.frontend.se)

* Patent Pending



The CAPAS-RT rotator/tilter enables precise control of rotation and tilt angle.



A CAPAS-RT automatic alignment system with Comrod Band 4 LOS antenna mounted on top of a Comrod TM series tactical telescopic mast.

Technical Data

Power Supply	24VDC per MIL-STD 1275E, 48V
Interfaces	CAN, RS232, RS485 and Ethernet
Alignment Modes	Closed loop mode with transceiver control Open loop mode with GPS control Hybrid mode
Planning Tool	Comrod Integrated Mission Planning System
Pointing Accuracy	0.3 degrees relative to base 1.5 degree relative to geographical north (GPS compass version)
Rotating Speed	> 15 degrees per second
Mechanical Limits	Rotation axis: Infinite. Tilt axis: +/- 10° Arbitrary limits can be defined in software.
Wind Rating (Max)	150 km/h (94 mph), when fitted with typical Comrod Band 4 antennas.
Operating Temperature (Ambient)	-46°C to +65°C (-51°F to 149°F)
Environmental Tests	Per MIL-STD-810F
Dimensions (nominal)	W = 42cm, H = 80cm, D = 30cm (~16.5 x 31.5 x 12 in)
Weight (approx.)	12kg
Mounting	Lower socket, Ø51mm x 90mm long (~Ø2 in x 3.5 in) Upper payload mounting spigot Ø50mm x 130mm (~Ø2 in x 5.1 in) Adaptors and extension tubes are available for a wide range of payloads and masts

