

APS730 Outdoor Antenna Control Unit

1. APS 700NS NoScreen Outdoor Controller
2. Outdoor Cabinet

APS 700NS NoScreen Outdoor Controller

- Compact NoScreen version
- Industrial grade PLC with 800 MHz ARM Cortex A9 CPU and 256 MB RAM + 256MB Flash
- DIN Rail Clamp
- Integrated in ODU Cabinet

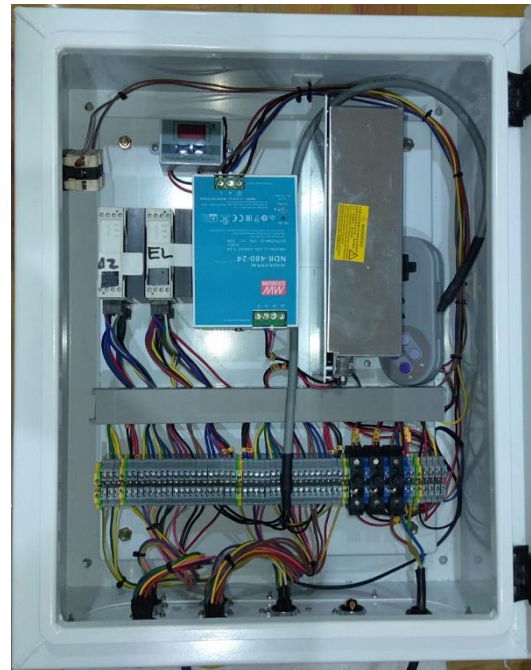


Outdoor Cabinet

- Motor & Electronics Power supplies
- Intelligent Motion Control Units(iMCU) with variable Speed & Acceleration Control
- For 24 – 60V DC & Brushless DC Motors
- Motor Power up to 800W per axis
- ServoController(opt.) for BLDC & AC Servomotors
- For 24V – 60V BLDC & 230V/400V AC Servomotors(opt.)
- Motor Power up to 15kW per axis
- High resolution Encoder inputs for optic or magnetic encoders
- ODU Climatisation
- Installation Handheld device for Manual movement during installation & maintenance
- Communication Interfaces
 - Motor Interface: Interface to Positioner(Az, El & Pol Motors, Encoders & Limit switches)



- Polarization Switch(opt.)
- Revolver Interface(opt.)
- Ethernet: Antenna Controller Graphics User Interface, Remote Antenna Control, Communication with Beacon & DVB-S2 Receiver
- USB(internal): ACU Software Upgrade
- Analog interface (opt.): Beacon receiver
- Digital RS232 interface(opt.): Beacon Receiver
- Optical(opt.): Fiber Optic Communication with APS700 IDU (SingleMode, MultiMode, various interfaces)
- Wi-Fi(opt.): Integrated Wi-Fi Router for Wireless Communication to APS00 Indoor Unit
- Power Requirement
 - DC & BLDC Motors: 110-240V AC, up to 1200W
 - DC & AC Servomotors: 110-240V AC, up to 30kW, 400V AC 3ph(opt.)
- Cabinet: powder painted steel, IP 65 protected
- Size: typical 600 x 500 x 210mm, other sizes possible
- Weight: approx. 35 kg, depending on configuration
- Operation Temperature: -30° to 50°C
- Humidity: 100% (condensing)



Features

- Control Interface: WebGUI via Ethernet cable
- 7 Axis Antenna control
 - Azimuth & Elevation + 4 Polarizations & 1 Revolver (Multifeed Revolver)
- 99 Satellite position store
- Automatic satellite pointing based on Positioner Location(GPS)

- Controller Options

1. Tracking
2. Autopointing
3. Polarization Switch
4. Modbus over TCP
5. Revolver
6. Externals Sensors

1. Tracking(opt.) of Inclined Orbit Satellites

- 4 Different tracking algorithms
 - Program Track
 - Time Track
 - Signal Track
 - Optimized Track

- Communication via Analog(Voltage) interface with Beacon & DVB Receiver with AGC output

- Digital(RS232 & Ethernet) Interface

for Beacon Receivers & DVB- DVB-S2 Receivers

- Search & Scan algorithm for wideband satellite detection

- Add-on Controller(opt.) for LEO/MEO tracking

2. Autopointing upgrade(opt.) for Automatic satellite acquisition

3. Polarization Switch(opt.) for Feed polarization changes

- Can be utilized for circular polarized Feeds (C, X, Ku, Ka)
- Works with GIML/A Polarization Drive & Rotary Joint
- Switching in-between LHCP, Linear & RHCP and vice versa.

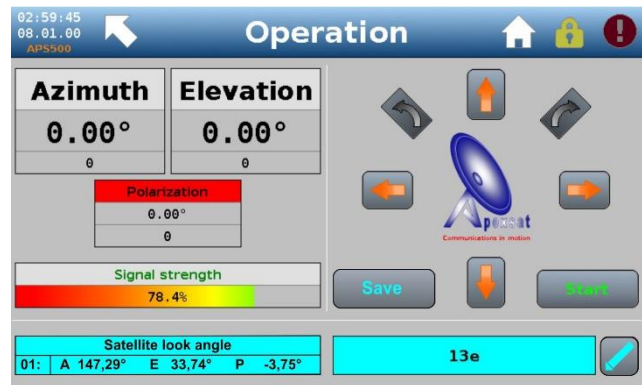
4. Remote Control via WebGUI, same UI, same features as touchscreen

- Remote Control via Modbus over TCP(opt.) Integration of APS700 Antenna Control unit into a multisystem NMS or external Control Device.

- Special Remote 10Hz IPM Mode for UAV tracking

5. Multifeed Revolver Control(opt.) for Multiband Antennas equipped with GIML/A Revolver and various feeds

- Including Single Feed polarization motorization control for every feed



- Externals Sensor upgrade(opt.) for ODU temperature control, humidity supervision etc.

APS730 ACU Schematics

