

Remote Control Unit Satellite Uplink Power Control Unit



This remote control unit is mainly useful for remote control of outdoor converter units. The unit is powered normally remotely from the outdoor unit. The front panel allows to manually control the configuration of an outdoor converter in a similar way as it is possible for indoor converter units.

Also versions to control more than one converter from the same unit are available (Options Dual and Multi). These units include an internal power supply.

Versions to control indoor units also include their own internal power supply.

Additionally further remote control via RS232, RS485 or IP over Ethernet is possible at this control unit, also additional alarm relay outputs are provided. For the connection to the outdoor unit or to the remote controlled unit in general, an RS485 connection is used.

As option this unit is also available for standard rack mount converters. In this case the unit includes a separate power supply.

Uplink Power Control

The Uplink Power Control is a hardware and software option to the control panel for the upconverter outdoor versions. This control panel can also be used together with upconverter indoor versions. Besides the uplink power control this control panel allows also remote control of the upconverter.

The Uplink Power Control senses a DC signal from a beacon receiver. If due to additional atmospheric attenuation caused by rain, snow, clouds or fog or also due to antenna misalignment the beacon signal is attenuated, the transmitted signal is increased proportionally until a configurable maximum additional gain is reached or the maximum gain of the upconverter is reached.

The uplink power control has the following interface for the DC signal from the beacon receiver:

- Connector type: DSUB-9, male
- DC voltage range: 0 .. 10 V
- Input for lock signal/alarm signal from the beacon receiver

The following Operational Parameters can be configured:

- Uplink power control on/off
- Maximum gain increase in reference to clear sky gain
- Sampling and update period in seconds
- Ratio between decrease of beacon signal and increase of transmission signal (due to difference of rain attenuation effect for different frequencies)
- Up to 5 DC values for beacon signal strength can be entered as reference points for linear interpolation (characteristic of beacon receiver).
- Clear sky value of DC beacon receiver signal
- Sustain period in seconds (up 3600 seconds) for which the uplink power control keeps the last gain increase value (in case of deep fade conditions where the beacon receiver can loose lock for some period of time).

The following Specifications can be monitored:

- DC signal from beacon receiver
- Calculated attenuation of beacon signal
- Current gain increase of transmission signal (theoretical value only if the uplink power control mode is off)

Remote Control Unit Satellite Uplink Power Control Unit

S-Type (standard version), H-Type (extended temperature range)

Model	RC-CO Remote Control for Outdoor Units	RC-CI Remote Control for Indoor Units
Monitoring and Control Interface:	RS232 or RS422/RS485 (Connectors DSUB09 female) (selectable by customer), IP over Ethernet	
Internal Monitor and Control Interface to controlled unit(s):	Standard: RS422/RS485 Alarm signal DC Supply from ODU 12...24 V Connector DSUB25 male Option PS: RS422/RS485 Alarm signal DC Supply to ODU 24 V Connector DSUB25 female Option Dual/Multi: RS422/RS485 Connector DSUB09 female	RS422/RS485 Connector DSUB09 female
Temperature Range:	-30 °C to 60 °C operating (the LCD display is operational: -20 °C to 60 °C) -30 °C to 80 °C storage	
Relative Humidity:	< 95% non condensing	
User Interface:	LCD, 2 x 40 characters, 4 cursor keys, 2 function keys	
Integrated Power Supply:	Option PS, Dual, Multi: 85...264 V AC, 40...70 Hz, 0.9 A max Option PS can supplied DC power from remote control to converter unit	85...264 V AC, 40...70 Hz 0.9 A max
Dimension and Weight:	483 x 44 x 270 mm ³ , 1 RU (19") appr. 4 kg	

Specifications are subject to change

Order Information:

**RC-CO-[Options] or
RC-CI-[Options]**

Possible Options are:

UPC (Uplink power control)
UPC/TS (Uplink power control with temperature sensor)
PS (Power supply on RC-CO)
DUAL (Remote Control for two frequency converters)
MULTI (Remote Control for up to 8 frequency converters)
T (Remote Control for dual channel tracking converters)

Examples:

RC-CO
RC-CI
RC-CO-UPC
RC-CO-PS