

# ASC for 2100 MHz

## Double Dual Duplex Antenna System Controller



Improving the radio uplink using tower mounted amplifiers is perceived as a key method of optimizing WCDMA networks. By ensuring maximum coverage including in-door penetration, the TMA supports the design of cost-efficient networks and extended talk-time handsets, low dropped call rates and high traffic billing.

The Double Dual Duplex Antenna System Controller (ASC) is an auxiliary unit of the RBS and supports two antenna branches. Each dual duplex unit supports a shared antenna between Tx and Tx and a single RBS feeder for Rx and Tx.

### **System integration**

The ASC is mounted in the antenna tower close to the antenna and used on the receiving paths in order to lower the overall receiver noise figure.

The XP platform of the ASC controls communication, gain setting and alarm handling. It is also a platform for remote Electrical Tilt (RET).

The ASC is supplied with power from the Antenna Interface Unit (AIU) and is supervised from the Main Processor (MP) in the RBS 3000 base station.

### **Excellent reliability**

The ASC's high level of redundancy and the lack of add-on units for powering and control ensures an reliability, both on unit and system level. Naturally, a high-performing lightning protection is integrated.

### **Key features**

- 4 duplex filters
- Flash memory
- Control platform
- 2 LNAs with remote controlled adjustable gain
- 115 kbps serial communication transceiver for feeder
- Control circuits for Remote Electrical Tilt (RET) or auxiliary unit

# Double Dual Duplex ASC

## Electrical specifications for ASC

Bandwidth:	60 MHz
Receiving passband:	1920-1980 MHz
Transmitting passband:	2110-2170 MHz
Gain:	27-33 dB
Max electrical delay:	<60 ns
Uplink noise figure:	<2 dB
Input intercept point IIP3:	>3 dBm
Input impedance:	50 ohm
Return loss:	>16 dB
Nominal voltage:	30 V (26-32 V)
Max voltage ripple:	<100m V peek to peek
Power consumption:	<12W

## Environmental specifications

Temperature range:	-33 °C to +65 °C (-27 °F to +49°F)
Mean Time Between Failure (MTBF):	>380.000 h
Sealing:	IP 65
Lightning protection:	EC 1024
Safety approval:	CE - marking
Safety standard:	EN 60950

## Mechanical specifications

Dimension (L x W x H):	312 x 160 x 83 mm (12.2 x 6 x 3 in)
Weight:	5.0 kg (11.0 lb)
RF Connector:	7-16 female
DC/Alarm:	Superimposed on the RF signal
Mounting:	Pole or wall mounting

## Ordering number:

KRY 112 42/2

