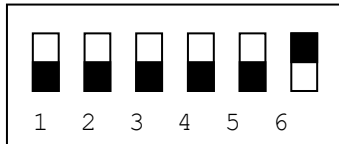


2.5 Synchronization Pulse

The IZT R3600/9 generates synchronization pulses internally. Interval lengths from 125 milliseconds up to 8 seconds can be chosen. The default configuration is 1 second.

Alternatively it is possible to feed an external synchronization pulse. Any rising edge on the SYNC_IN connector will be used as a basis for the internal sync mechanism. To enable the R3600/9 for external synchronization it is necessary to configure the jumper settings on the backplane of the chassis.



Default setting for internal 1 sec synchronization pulse: switch 1-5 down, switch 6 up

The DIP positions 1 – 3 define the duration of the internal synchronization pulse:

DIP 1	DIP 2	DIP 3	Pulse duration
down	down	down	1 second / 1 Hertz
up	up	up	125 milliseconds / 8 Hertz
up	up	down	250 milliseconds / 4 Hertz
up	down	up	500 milliseconds / 2 Hertz
up	down	down	1 second / 1 Hertz
down	up	up	2 seconds / 0,5 Hertz
down	up	down	4 seconds / 0,25 Hertz
down	down	up	8 seconds / 0,125 Hertz

The DIP positions 4 and 5 are reserved and must remain in position "down" for normal operation.

The DIP position 6 defined the source for the synchronization output signals SYNC OUT 1-8:

- DIP position 6 = up : internal pulse generation as source
- DIP position 6 = down : external pulse as source

3.2 Rear Panel

RF 1 ... RF 9:	RF input for up to 9 channels
RF 10 ... RF 12:	RF input for up to 3 alternative channels (optional)
SYNC IN:	Synchronization pulse input
10MHZ IN:	10 MHz reference input
Power:	Wide range power supply input 110/220 VAC, 50/60 Hz

3.3 Technical Specifications

The following specifications are for one single channel

Frequency range 9 kHz – 30 MHz

Frequency range	9 kHz to 30 MHz
Conversion concept	direct sampling
Maximum input power	+15 dBm
Tuning resolution	1 Hz
Tuning accuracy	< 0.2 Hz
VSWR	< 2.1
Internal reference stability	< 1×10^{-7}
Oscillator phase noise	-130 dBc/Hz typical @ 1 kHz offset -140 dBc/Hz typical @ 10 kHz offset
Sweep time	< 3 ms
Scanning speed	> 4 GHz /sec
3 rd -order intercept point	+40 dBm, typical
Noise figure	9 dB, typical
IF rejection	> 120 dB, typical
Image rejection	> 110 dB, typical
Oscillator reradiation at antenna output	< -110 dBm, typical

The following specifications are for the complete IZT R3600/9 unit

External 10 MHz Reference

Frequency	10 MHz ± 10 Hz maximum
Power Level	0 ... +10 dBm

External Synchronization Pulse

Low Level	0.5 Volt, maximum
High Level	2.0 Volt, minimum – 3.3 Volt, typical
Rise or Fall Time	1 ns / Volt
Operating Temperature	0°C to +50°C
Storage Temperature	-20°C to +70°C
Humidity	max. 85%, non-condensing

Mechanical

Width	19 Inch
Height	8 U
Depth	500 mm / 527mm with handles
Weight	Approx 40 kg

External Interfaces

RF1 to RF 12.....	50 Ohm, N-female
SYNC IN	CMOS 3.3 Volt (5 Volt tolerant input), SMA-female
10MHZ IN	50 Ohm, 10 MHz, 0 dBm ... +10 dBm, SMA-female
ANTENNA	RS422, DSUB-15 female
LAN	RJ45
Power Supply	IEC320, 100 - 250 VAC, 50-60 Hz
Power Consumption	300 VA

Specification subject to change without prior notice.