

Advance Integrated Downconverter

AIDC 1831/AIDC 3031/AIDC 3731

Features

- * The industry's first manufacturer to filter out PCS and WCS interferences
- * Digital ready meets 256 QAM standard
- * Gain options: 18, 30, and 37 dB
- * LO options: 2278 MHz or per request
- * Integrated antennas options: 12 dBi Corner Reflector, 15 dBi Spotbeam Dome, 18 dBi Viper Yagi antenna or 18/24 dBi grid antennas
- * Noise figure: 1.5 dB
- * NTSC, PAL, and SECAM compatible



TranSystem Inc., a world-wide leader in MMDS/MDS technology, offers a complete line of PCS and WCS filtering downconverters. Our designs have been copied by many, but the original out performs the rest. The digital ready AIDC easily integrates with parabolic antennas or any of our esthetically correct antennas.

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AIDC Advance Integrated Downconverter

- * Gain Options-18dB, 30 dB & 37 dB
- * Channels-31
- * Digital Ready
- * The Industry's FIRST company to filter out PCS & WCS

Specifications

Parameter	AIDC 1831	AIDC 3031	AIDC 3731
Digital Compatible	256 QAM	256 QAM	256 QAM
Gain Options	18 dB	30 dB	37 dB
Input Frequency	2500~2686 MHz	2500~ 2686 MHz	2500~2686 MHz
Output Frequency	222 - 408 MHz	222 - 408 MHz	222 - 408 MHz
Gain Stability over temp	+ / - 2 dB	+ / - 2 dB	+ / -2 dB
Gain Flatness	+ / - 0.1 dB @6 MHz + / - 1.5 dB @ 222~408 MHz	+ / - 0.1 dB @6 MHz + / - 1.5 dB @ 222~408 MHz	+ / - 0.1 dB @6 MHz + / - 1.5 dB @ 222~408 MHz
Noise Figure over temperature range	3.5 dB+ / -0.5 dB max	1.5 dB + / -0.5 dB max	1.5 dB + / -0.5 dB max
VSWR	1.5:1	1.5:1	1.5:1
Group Delay	+ / - 10 ns over any 6 MHz	+ / - 10 ns over any 6 MHz	+ / - 10 ns over any 6 MHz
Bit Error Rate at Min. Signal	<10 ⁻¹⁰ for a C/N of 27 dB	<10 ⁻¹⁰ for a C/N of 27 dB	<10 ⁻¹⁰ for a C/N of 27 dB
LO Frequency*	2278 MHz	2278 MHz	2278 MHz
LO Frequency Stability	+ / - 25 KHz over temp	+ / - 25 KHz over temp	+ / - 25 KHz over temp
LO Phase Noise	-75 dBc/Hz @ 100 Hz -85 dBc/Hz @ 1 KHz -95 dBc/Hz @ 10 KHz -105 dBc/Hz @ 100 KHz -125 dBc/Hz @ 1MHz	-75 dBc/Hz @ 100 Hz -85 dBc/Hz @ 1 KHz -95 dBc/Hz @ 10 KHz -105 dBc/Hz @ 100 KHz -125 dBc/Hz @ 1MHz	-75 dBc/Hz @ 100 Hz -85 dBc/Hz @ 1 KHz -95 dBc/Hz @ 10 KHz -105 dBc/Hz @ 100 KHz -125 dBc/Hz @ 1MHz
LO Leakage IF Port	<-45 dBm	<-45 dBm	<-45 dBm
LO Leakage Antenna Port	<-60 dBm	<-60 dBm	<-60 dBm
Image Rejection	>80 dB	>80 dB	>80 dB
IF Rejection	>80 dB	>80 dB	>80 dB
PCS Rejection	>100 dB	>100 dB	>100 dB
WCS Rejection	>52 dB	>52 dB	>52 dB
Spurious in IF band	<-100 dBm	<-100 dBm	<-100 dBm
IMD (2 tone test)	-40 dBc (0 dBm @ output)	-50 dBc (0 dBm @ output)	-50 dBc (0 dBm @ output)
RF Output Level (max) @ CTB > 55 dBc	31 Channels: 26 dBmV 20 Channels: 28 dBmV 10 Channels: 32 dBmV	31 Channels: 30 dBmV 20 Channels: 32 dBmV 10 Channels: 36 dBmV	31 Channels: 30 dBmV 20 Channels: 32 dBmV 10 Channels: 36 dBmV
Power output @ 1dB compression	12 dBm	14 dBm	14 dBm
Output Impedance	75 ohms	75 ohms	75 ohms
Output Connector	F-type female	F-type female	F-type female
Supply Voltage	+15 VDC to +24 VDC	+15 VDC to +24 VDC	+15 VDC to +24 VDC
Supply Current	130 mA max	160 mA max	160 mA max
Temperature	-40 to +70 degrees C	-40 to +70 degrees C	-40 to +70 degrees C
Humidity	100% weatherproof	100% weatherproof	100% weatherproof
Lighting Protection	Meets or exceeds IEEE specifications	Meets or exceeds IEEE specifications	Meets or exceeds IEEE specifications
Surge Protection	Meets or exceeds IEEE specifications	Meets or exceeds IEEE specifications	Meets or exceeds IEEE specifications

Note: Typical value @25°C, unless otherwise specified.

*=Please contact Sales for custom LO frequencies.