WIRELESS CONNECTIVITY

WIRELESS PRODUCTS SELECTOR GUIDE

Tx
Transmitters

Rx
Receivers

TRx
Transceivers

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WIRELESS PRODUCTS SELECTOR GUIDE

Tx
Transmitters

EZRadioPRO™

Device		IA4230	IA4231
Type		Transmitter	Transmitter
Modulation Scheme	OOK	■	■
	FSK	■	■
Datarate (Max)		FSK/GFSK=128 kbps OOK=128 kbps	FSK/GFSK=128 kbps OOK=128 kbps
Frequency Range	240-930 MHz	n/a	■
	900-960 MHz	■	n/a
Output Power Range		-8 to +13 dBm	-8 to +13 dBm
Tx Current	(0 dBm)	13 mA	13 mA
	(+13 dBm)	21 mA	21 mA
	(+20 dBm)	n/a	n/a
Package		QFN-16	QFN-16

EZRadio®

Device		IA4220	IA4221	IA4222
Type		Transmitter	Transmitter	Transmitter
Modulation Scheme	OOK	■	■	n/a
	FSK	■	■	■
Datarate (Max)		FSK=256 kbps OOK=256 kbps	FSK=115 kbps OOK=512 kbps	FSK=115 kbps
Frequency Bands[1]	315 MHz	■	n/a	n/a
	434 MHz	■	■	n/a
	868 MHz	■[2]	■	■
	915 MHz	■	■	■
P(Max) in 868MHz Band (EIRP)		1 dBm	6 dBm	6 dBm
P(Max) in 434MHz Band (EIRP)		3 dBm	8 dBm	n/a
Supply Voltage		2.2 – 5.4V	2.2 – 5.4V	2.2 – 3.8V

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FIFO		n/a	1 bit	64 bit
Frequency Step Resolution		2.5 – 7.5kHz	2.5 – 7.5kHz	20kHz
PLL Startup Time		250µs	250µs	500µs
Idle Current		1.5mA	1.5mA	0.5mA
Package		TSOP-16	TSOP-16	TSOP-16
Network Readiness	Proprietary Schemes	■	■	■

NOTES:

(1) A Freq band is a group of frequencies named by the centre frequency
(2) Engineers designing at 868MHz are recommended to look at the 4x21 equivalent as the 4x21 products offer superior performance in the 868MHz band

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WIRELESS PRODUCTS SELECTOR GUIDE

Rx
Receivers

EZRadioPRO™

Device		**IA4330**
Type		Receiver
Modulation Scheme	OOK	■
	FSK	■
Datarate (Max)		FSK/GFSK=128 kbps OOK=40 kbps
Frequency Range	240-930 MHz	■
	900-960 MHz	■
Output Power Range		n/a
Sensitivity (40 kbps)		-117 dBm
Rx Current		17 mA
Package		QFN-20

EZRadio®

Device		**IA4315**	**IA4320**	**IA4322**
Type		Receiver	Receiver	Receiver
Modulation Scheme	OOK	■	■(1)	n/a
	FSK	n/a	■	■
Datarate (Max)		OOK=20 kbps	FSK=256 kbps	FSK=256 kbps
Frequency Bands(2)	315 MHz	n/a	■	n/a
	434 MHz	■	■	n/a
	868 MHz	■	■	■
	915 MHz	■	■	■
Best Attainable Sensitivity (1.2 kbps)		-110 dBm	-109 dBm	-108 dBm
Sensitivity (in 868 MHz Band) (9.6 kbps, 0.1% BER)		-102 dBm	-102 dBm	-104 dBm

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Supply Voltage		2.2 – 3.8 V	2.2 – 5.4 V	2.2 – 3.8 V
FIFO		64 bit	16 bit	48 bit
Frequency Step Resolution		10 – 20 kHz	2.5 – 7.5 kHz	20 kHz
PLL Startup Time		500 µs	250 µs	500 µs
Idle Current		0.6 mA	3.0 mA	0.5 mA
Package		TSOP-16	TSOP-16	TSOP-16
Network Readiness	Proprietary Schemes	■	■	■

NOTES:

(1) IA4320 OOK Receiver datarate is limited to 1kbps

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WIRELESS PRODUCTS SELECTOR GUIDE

TRx
Transceivers

EZRadioPRO™

Device		IA4430	IA4431	IA4432
Type		Transceiver	Transceiver	Transceiver
Modulation Scheme	OOK	■	■	■
	FSK	■	■	■
Datarate (Max)		FSK/GFSK=128 kbps OOK=40 kbps	FSK/GFSK=128 kbps OOK=40 kbps	FSK/GFSK=128 kbps
Frequency Range	240-930 MHz	n/a	■	■
	900-960 MHz	■	n/a	n/a
Output Power Range		-8 to +13 dBm	-8 to +13 dBm	+11 to +20 dBm
Tx Current	(0 dBm)	13 mA	13 mA	n/a
	(+13 dBm)	21 mA	21 mA	24 mA
	(+20 dBm)	n/a	n/a	60 mA
Sensitivity		-117 dBm	-117 dBm	-117 dBm
Package		QFN-20	QFN-20	QFN-20

EZRadio®

Device		IA4420	IA4221	IA4520
Type		Transceiver	Transceiver	Transceiver
Modulation Scheme	OOK	n/a	n/a	n/a
	FSK	■	■	■
Datarate (Max)		256 kbps	115 kbps	256 kbps
Frequency Bands[(1)]	315 MHz	■	n/a	■
	434 MHz	■	■	■
	868 MHz	■	■	■
	915 MHz	■	■	■
P(Max) in 868MHz Band (EIRP)		2 dBm	7 dBm	4 dBm
P(Max) in 434MHz Band (EIRP)		3 dBm	5 dBm	8 dBm

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Best Attainable Sensitivity (1.2 kbps)		-109 dBm	-112 dBm	-109
Sensitivity (in 868MHz Band) (9.6 kbps, 0.1% BER)		-102 dBm	-103 dBm	-102
Supply Voltage		2.2 – 5.4 V	2.2 – 3.8 V	2.2 – 3.8 V
FIFO		16 bit	16 bit	16-bit
Frequency Step Resolution		2.5 – 7.5kHz	2.5 – 7.5kHz	2.5 – 7.5kHz
PLL Startup Time		250µs	200µs	250µs
Idle Current		3.0mA	0.6mA	0.6mA
Package		TSOP-16	TSOP-16	QFN-36
Network Readiness	Proprietary Schemes	■	■	■
	EZMac	■	■	■

NOTES:

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