

SATCOM TRANSMITTER

BUC

Ka Dual-band 10W BUC

M-TD3010


TYPICAL SPECIFICATIONS

Output frequency	Band 1: 29.0 - 30.0 GHz Band 2: 30.0 - 31.0 GHz	Gain	65dB typ @0dB attenuation
Input frequency	1000 - 2000 MHz for each band	Gain control	Δ15dB (50 to 65 dB), 0.5dB step
LO frequency	Band 1: 28.0GHz Band 2: 29.0GHz	Gain stability over temp	±2.0dB at any const. frequency
Frequency sense	No inversion	Gain flatness	±1.0dB in any 45MHz ±2.5dB over full band
Saturated output power	+40.0dBm typ @-40°C +39.5dBm typ @+25°C +39.0dBm min @+60°C	Power requirement	+36 to +56 VDC supplied through MS connector
Linear output power	+37dBm	Power consumption	70W max @ P _{linear} 90W max @ P _{sat}
Input return loss	12dB min	Input interface	N-female, F-female
Output return loss	10dB min	Output interface	WR-28
Phase noise (SSB)	-60dBc/Hz max @100Hz -73dBc/Hz max @1KHz -83dBc/Hz max @10KHz -93dBc/Hz max @100KHz	Dimension	222.0(L) x 150.0(W) x 94.5(H) mm
External reference signal frequency	10MHz	Weight	3.2kg
External reference level	-5 to +5 dBm	Operating temp	-40 to +60 °C
External reference phase noise	-150dBc/Hz max @ 1KHz	Humidity	0 - 95 %
Spectral regrowth	25dBc min @linear power DVB-S2, 8PSK, 5 Msps, roll-off of 25%	DC connector	MS3112E14-5P
Spurious (In/Out-band)	-55dBc max @linear power	M&C interface	MS3112E12-10P
		M&C function	- Output power - Temperature - LO status - Output power mute - Gain control - Fan status - Firmware upgradable - Band switching

* External mute option is available upon customer request.

HOW TO ORDER Ka DUAL-BAND 10W BUC

M-TD3010N-E

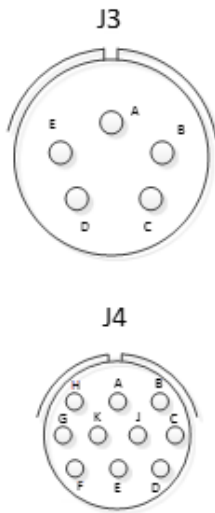
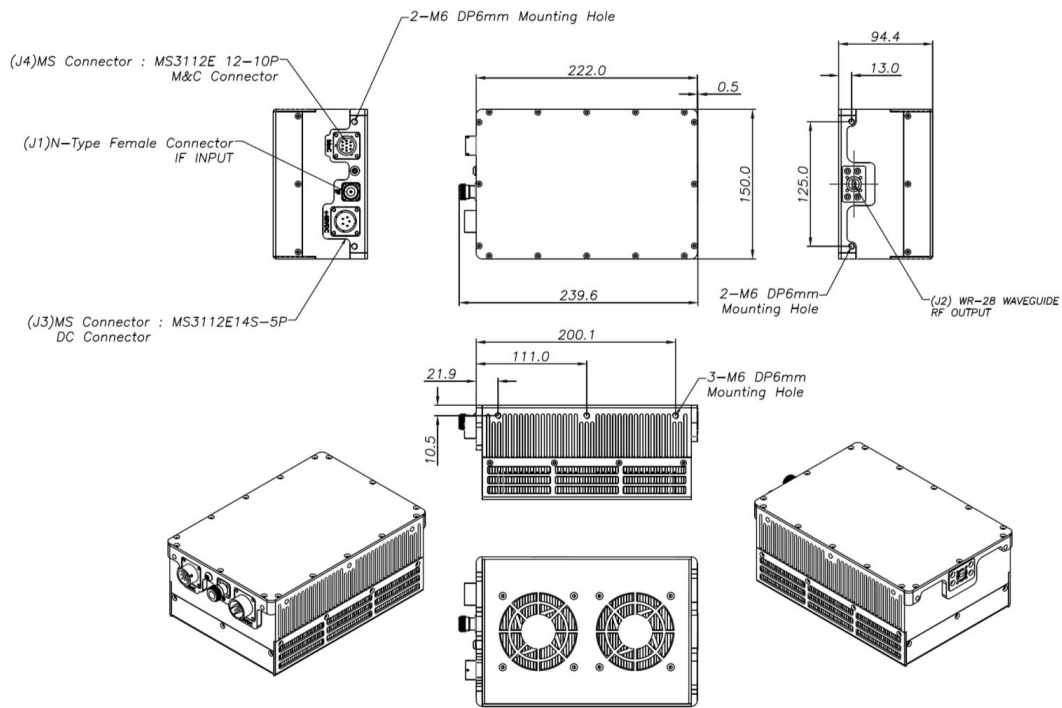
DC/M&C option	.....	B : DC via IFL, fixed gain, M&C
Input connector	.....	C : DC via IFL, gain adjustable, M&C
Output power	.....	CW : DC via IFL, gain adjustable, M&C (Web browser)
Frequency	.....	D : DC via MS connector, fixed gain, M&C
Product	.....	E : DC via MS connector, gain adjustable, M&C
Application	.....	W : DC via MS connector, gain adjustable, M&C (Web browser)
		N : 50Ω, F : 75Ω
		10 : 10W (+40dBm)
		30 : Band selectable (Band 1: 29.0 - 30.0 GHz, Band 2: 30.0 -31.0 GHz)
		TD : Dual-band BUC series
		M : Mobility series

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AVAILABLE OPTIONS

Option	Gain Control	Connectors		M&C	
		DC Input	M&C	PC-based GUI (Ethernet or RS-232)	Web-based GUI (Web browser)
B	Fixed Gain	IFL	MS3112E12-10P (10-pin)	Available	Unavailable
C	Adjustable	IFL	MS3112E12-10P (10-pin)	Available	Unavailable
CW	Adjustable	IFL	MS3112E12-10P (10-pin)	Available	Available
D	Fixed Gain	MS3112E14-5P (5-pin)	MS3112E12-10P (10-pin)	Available	Unavailable
E	Adjustable	MS3112E14-5P (5-pin)	MS3112E12-10P (10-pin)	Available	Unavailable
W	Adjustable	MS3112E14-5P (5-pin)	MS3112E12-10P (10-pin)	Available	Available

OUTLINE DRAWING AND INTERFACE



Connector	Parameter	Description
J1	IF input connector	N-female, panel-mounted
	Impedance	50 ohm
	10MHz reference input	
J2	RF output connector	WR-28
J3 (Opt. D, E, W)	DC	Panel-mount (MS3112E14-5P)
	A	N.C.(Not connected)
	B, C	+36 to +56 VDC (DC Power +)
	D, E	GND (DC Power -)
J4	M&C(Ethernet or RS232)	Panel-mount (MS3112E12-10P)
	J4-A	RS-232 Tx
	J4-B	RS-232 Rx
	J4-C	Ethernet Rx-
	J4-D	
	J4-E	EXT Mute GND (Option*)
	J4-F	EXT Mute HIGH (Option*)
	J4-G	Ethernet Tx+
	J4-H	RS-232 GND
	J4-J	Ethernet Rx+
	J4-K	Ethernet Tx-

* External mute option is available upon customer request. External mute is activated by connecting EXT Mute HIGH(J4-F) to EXT Mute GND(J4-E).