

SATCOM TRANSMITTER

BUC

Ka-band 16W BUC M-T2916, M-T29E16, M-T3016



TYPICAL SPECIFICATIONS

Output frequency	M-T2916: 29.5 - 30.0 GHz M-T29E16: 29.0 - 30.0 GHz M-T3016: 30.0 - 31.0 GHz	Gain	74dB typ @0dB attenuation
Input frequency	M-T2916: 950 - 1450 MHz M-T29E16: 1000 - 2000 MHz M-T3016: 1000 - 2000 MHz	Gain control	Δ10dB (64 to 74 dB), 0.5dB step
LO frequency	M-T2916: 28.55GHz M-T29E16: 28.0GHz M-T3016: 29.0GHz	Gain stability over temp	2.0dB at any const. frequency
Frequency sense	No inversion	Gain flatness	1.5dBp-p in any 100MHz 2.5dBp-p in any 250MHz
Saturated output power	+42dBm min @-40°C +42dBm typ @+25°C +41dBm min @+55°C	Power requirement	+36 to +56 VDC supplied through MS connector
Linear output power	+40dBm	Power consumption	125W max @linear power
Input return loss	10dB min	Input interface	N-female, F-female
Output return loss	12dB 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(L) x 150(W) x 105(H) mm
External reference signal frequency	10MHz	Weight	4.0kg
External reference level	-5 to +5 dBm	Operating temp	-40 to +55 °C
External reference phase noise	-150dBc/Hz max @1KHz	Humidity	up to 100% condensing
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

* External mute option is available upon customer request.

HOW TO ORDER Ka-BAND 16W BUC

M-T2916N-E

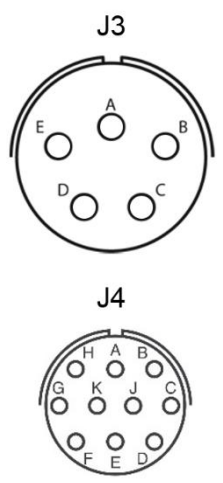
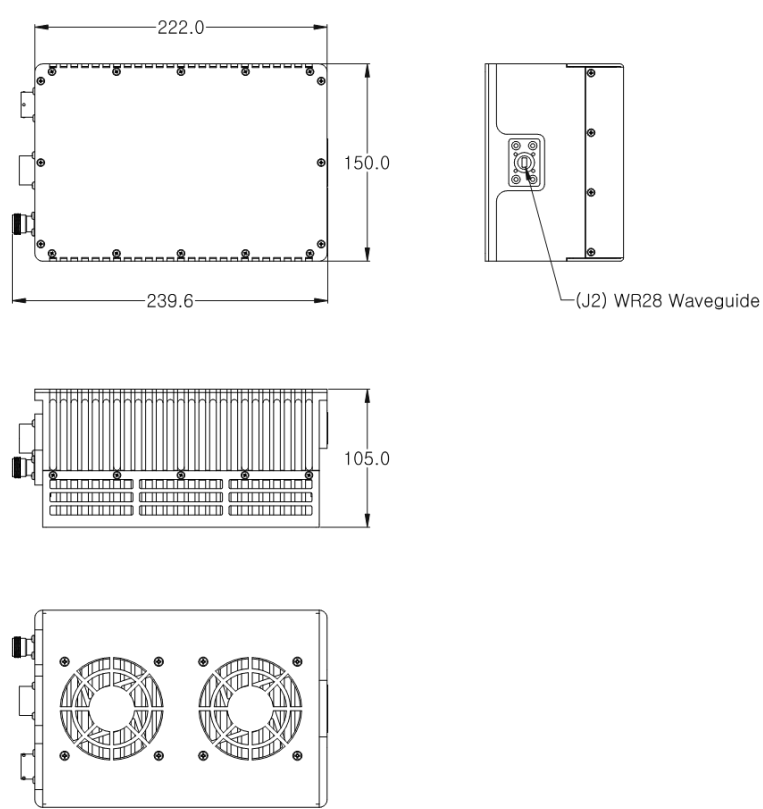
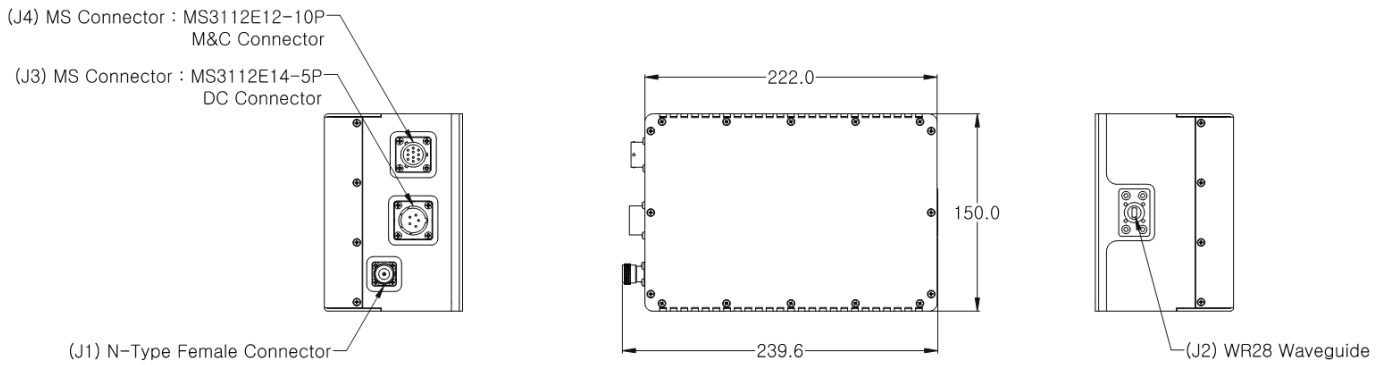
DC/M&C option	E : DC via MS connector, gain adjustable, M&C
Input connector	W : DC via MS connector, gain adjustable, M&C (Web browser)
Output power	N : 50Ω, E : 75Ω
Frequency	16 : 16W (+42dBm)
Product	29 : 29.5 - 30.0 GHz, 29E : 29.0 - 30.0 GHz, 30 : 30.0 - 31.0 GHz
Application	T : BUC series
	M : Mobility 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)
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	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).