



Microwave
Power Modules
product
summary

TMD

...the power in microwaves!

MPMS (Microwave Power Modules)

For Radar, EW and Communications/Datalinks Applications

“Perfectly Packaged Power” aptly describes TMD’s MPMS, our newest and neatest range of rugged amplifiers.

Each unit comprises compact power supply and mini TWT, combined into an ultra-compact, lightweight “drop in” amplifier block. This simplifies system design and installation, increases reliability and minimises safety hazards. The units also feature high electrical efficiency and excellent thermal management.

Performance is factory set, removing the need for any user adjustments in the field, and if necessary permitting easy field replacement of the complete unit.

The product range covers S to Ka band, and includes CW, pulsed and CW/pulsed units.

These MPMS are particularly suitable for airborne applications or for other situations where space and weight are critical. They have created considerable interest worldwide and several new models have recently been introduced, making this one of TMD’s fastest growing product lines.

The following table shows a selection of generic products in this range – but don’t worry if you can’t see exactly what you are looking for – bespoke solutions are available, although the impossible may take a little longer! Our Business Development Team is always eager to discuss the ways in which TMD can contribute to new technology areas.

For more details of TMD’s products and capabilities, please go to www.tmd.co.uk, or request a copy of our capability brochure.

We also offer a comprehensive repairs service for our microwave products; contact us at wecare@tmd.co.uk for an evaluation.

We provide after sales support wherever you are in the world.

TMD is approved to the rigorous Quality Standard BS EN ISO9001:2008 – quality is at the heart of everything we do.



Microwave Power Modules (MPMs)

Please note - these are generic types only – many other variants are available to order

Type Number	Frequency Range GHz	Output Power W (RF)	Gain dB	Duty Cycle %	Pulse Length us	Prime Power	Tube/Gun Type	Cooling	Size LxWxH mm	Weight kg	Appli-cation	Special Features
MPMs (Microwave Power Modules)												
PTX8340	2.0-8.0	80	50	CW/ Pulsed	-	270 VDC	FE TWT	Cond'n	280x200x32	3.5	R,EW,C	
PTX8701	2.0-6.0	100	58	CW/ Pulsed	-	270 V DC	FE TWT	Cond'n	305x200x32	4	R,EW,C	
PTX8200	4.5-18.0	100	50	CW/ Pulsed	-	270 VDC	FE TWT	Cond'n	260x200x32	4	R,EW,C	
PTX8207	4.5-18.0	140	50	CW/ Pulsed	-	270 VDC	FE TWT	Cond'n	260x200x32	4	R,EW,C	
PTX8218	7.9-8.4	100	51	CW	-	270 VDC	FE TWT	Cond'n	260x200x32	3.7	C	
PTX8202	9.0-10.0	110	50	CW/ Pulsed	-	270 VDC	FE TWT	Cond'n	250x200x32	4	R	Low noise
PTX8511	9.0-10.0	2000	58	5	50	28 VDC	Grid TWT	Cond'n	350x160x50	4.5	R	
PTX8400	X band	1000	55	5	100	28 VDC	Grid TWT	Cond'n	300x160x50	3.8	R	
PTX8219	13.75-14.5	110	50	CW	-	270 VDC	FE TWT	Cond'n	260x200x32	4	C	
PTX8621	15.5-17.5	600	60	7	50	28 VDC	Grid TWT	Cond'n	305x250x80	10	R	Fwd/rev Power Protection
PTX8610	16.25-16.75	2000	60	2	90	28 VDC	Grid TWT	Cond'n	305x180x74	6.2	R	
PTX8320	26.0-40.0	50	40	CW/ Pulsed	-	270 VDC	FE TWT	Cond'n	250x200x40	4	EW	
PTX8321	30.0-31.0	50	40	CW/ Pulsed	-	270 VDC	FE TWT	Cond'n	250x200x40	4	C	
Ultra Compact Modular MPMs												
PTXM1002	4.5-18.0	100	58	CW/ Pulsed	-	270 VDC	FE TWT	Cond'n	190x120x30	1.7	EW,C	
PTXM1001	6.0-18.0	140	50	CW/ Pulsed	-	270 VDC	FE TWT	Cond'n	190x120x36	1.95	R,EW,C	
PTXM1000	13.75-14.5	110	50	CW Only	-	270 VDC	CW TWT**	Cond'n	190x120x30	1.7	C	
New range - other variants under development												
Solid State MPMs												
PTS6900	2.0-6.0	150	50-60*	CW	-	28 VDC	-	Cond'n	325x200x50	4	EW	GaN MMIC

EW - Electronic Warfare; R - Radar; FE - Focus Electrode; C - Communications *user adjustable **no modulator

TMD is also able to provide input power converters, control boxes and filters according to customers' requirements.

Microwave Power Modules (MPMs) - Accessories

Power Converters	
PTM8290	48 V to 270 V DC-DC converter module for use with PTX8000 type MPMs
PTM8293	28 V to 270 V DC-DC converter module for use with PTX8000 type MPMs
PTM8292	115 V AC to 270 V AC-DC converter module for use with PTX8000 type MPMs
PTM8295	115 V AC to 270 V Rectifier filter module for use with PTX8000 type MPMs
Control Boxes	
Custom control boxes can be provided for many of TMD PTX MPMs and rugged amplifiers (Datasheet EVD6106 describes the range)	

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