Receiver Front Ends & Transceivers

PMI designs and manufactures a wide variety of high-frequency Receiver Front Ends and Transceivers for state-of-the-art applications. PMI is developing and offering these systems that interface with Open VPK architecture and use VITA 67 high frequency interconnects. Standard models are available. PMI can also design a device to meet your specific requirements.

Rack & Chassis Mount Products

PMI offers various RF and Microwave products that range from 250 kHz up to 40 GHz, which are supplied in a ruggedized chassis. Our ruggedized, military grade chassis products are built to meet your exact application needs. Various functions can be offered including: Amplification, Attenuation, Switching, Power Detection/Reflex Detection, Phase Shifting/Phase Modulation, Pulse Modulation, Noise Generation, RF Filtering, RF Limiter, Power Splitting as well as RF Signal Distribution. Send us your Block Diagram for review and PMI will offer you a turn-key solution.

SMT & QFN Products

PMI offers custom surface mount and QFN packaging for many types of devices, including SGL Vias, Log Amplifiers, Phase Shifters, Alternators, Switches and Low Noise Amplifiers. PMI also offers multifunctions in a single QFN package such as Limit/LNA or LNA/Detector. Let PMI offer you a custom solution to reduce the size of your PCB layout.

Switches – Solid State, Switch Matrices & Pulse Modulators

PMI’s line of RF, Microwave and millimeter Solid State Switches covers the frequency range of up to 56 GHz in many standard models with several options available: Ultra-Broadband, Ultra-High Isolation, Low Loss, Low Video Transients, Ultra-High Switching Speed, Very Low Power Consumption, SPDT through SP4T, Reflective or Absorptive and available in very small packaging. While all Switch products are available connectorized, many are also available in drop-in configuration.

PMI Switch Matrix products can be supplied as 4 x 4, 8 x 8, 16 x 16 or 32 x 32 blocking or non-blocking matrices and operate up to 56 GHz. Options include switching control via TTL, TTL232, RS422/45, analog and/or front panel touch screen LCD. Units can be supplied in a ruggedized 1U to 16U 19” Chassis. Custom designs are welcome.

USB Controlled & Powered Products

PMI offers the highest quality RF and Microwave Control Products and Amplifiers that are self-contained within a small package, operate up to 40 GHz and receive all control commands and DC power via a built-in USB port. PMI provides a GUI that can be installed on a Windows based PC which allows control of the various switches and attenuators. Additional products can be supplied, including Phase Shifters, Bi-Phase Modulators, I/Q Modulators, Pulse Modulators, Oscillators, Detectors, and Threshold Detectors.

Amplifiers – Solid State

PMI provides solutions and products that will ensure your program’s success. You can rely on PMI to be a supportive, resourceful and technical business partner for all of your RF & Microwave requirements from DC to 65 GHz.
Amplifiers – Solid State
PMI offers a full-line of RF and Microwave Amplifiers that range from 250 kHz up to 50 GHz. Available in Narrow-Band, Octave-Band, Sub-Octave, Multi-Octave and Ultra-Broadband models. Our Amplifiers are available in a variety of types: Variable Gain, Gain Correction, Positive Gain Step, Limiting-Amplifiers and High IP Amplifiers for high power. All PMI Amplifiers are designed and developed. Please check with us if you need custom DLVA’s and SDLVA’s to meet your requirements or replace obsolete products.

PMI's Detector Logarithmic Video Amplifiers (DLVA's) are offered covering DC to 40 GHz. PMI’s DLVAs, ERDLVAs & SDLVAs that include high sensitivity Successive Diode Detectors, Directional Detectors, Phase Shifters & Bi-Phase Modulators. Form, Fit, Functional Products & Service. You are faced with the problem of locating obsolete devices to maintain an older system? Or replacing products from vendors who are no longer available? PMI has over 30 years of experience designing products to replace obsolete electronic devices, while meeting or exceeding the original product’s performance. PMI uses today’s modern technology to build the latest technology in small, obsolete devices while meeting the Form, Fit and Functionality. Full screening services are also available.

Detectors – RF/Microwave
PMI’s RF and Microwave Detector products are available in a variety of designs that include high sensitivity Successive Diode Detectors, Low Barrier Schottky Diodes, Zero Bias Schottky Detectors and Threshold Detectors (Fixed and Adjustable) that range from 40 to +50 dBm and either ECL or TTL output. Features include frequency coverage up to 40 GHz, connectorized or surface mount, connector options and hermetic sealing, military or space screening and custom packaging.

Diplexers and Multiplexers
PMI offers frequency discriminators and IFMs that range up to 40 GHz with many options available. Contact PMI to discuss your specific requirements.

IQ Vector Modulators & Single Sideband Modulators
PMI Modulators are available with high-speed modulation, low spur generation, low insertion loss and high linearity. All PMI IQ modulators are built for high power and high linearity operation and are suitable for standard and custom designed housings. PMI offers unique designs that cover wide bandwidths such as a single unit covering 20 MHz to 15 GHz as an example.

Integrated MIC/MMIC Assemblies (IMAs)
PMI offers the highest quality Multi-Function Integrated Microwave Assemblies and modules for commercial, industrial and military applications with operating frequency range up to 50 GHz. PMI custom designs modules and assemblies that are built to your SCD or specifications with a variety of options including integrated amplification, frequency conversion, filtering, wavelength, phase shifting, phase locking, phase detection, modulation, coupling, limiting, digital control, hermetic sealing and military space screening. Phase Shifters & Bi-Phase Modulators
PMI offers the highest quality Phase Shifters and Bi-Phase Modulators for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Analogue or digital control, high phase accuracy, high speed and low insertion loss are available. Phase Shifters can cover from 0° to 360° in 1° steps, and Bi-Phase Modulators can switch from either of two-phase levels, such as 0° to 90°, 90° to 180° or 180° to 360°.

Power Dividers/Combiners
PMI offers the highest quality Power Dividers and Power Combiners for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Features include low loss, high isolation, excellent amplitude and phase balance and small package sizes. Available options include hermetic sealing, military or space screening and custom packaging.

Gain & Loss Equalizers
PMI offers a wide range of Equalizers that are available in narrow-bandwidths or broadband. Available options include broadband loss & CSVHF, various frequency equalization values, and small size & standardized packaging.

Log Amplifiers
PMI IF and RF Log Amplifiers use the same technology as our famous successive diode detectors, and are available in a variety of designs. This makes for extremely stable, linear devices operating up to 40 GHz.

Miscellaneous Products
PMI offers bias tees, isolators, mixers, active mixers, prescalers, and through packaging options to complete your design solutions.

Monopulse Comparators
PMI designs and manufactures a variety of Coaxial Monopulse Comparators for beamforming antenna applications up to 21.2 GHz. Form, fit and functional products are available. Form, Fit, Functional Products & Service. PMI has over 30 years of experience designing products to replace obsolete electronic devices, while meeting or exceeding the original product’s performance. PMI uses today’s modern technology to build the latest technology in small, obsolete devices while meeting the Form, Fit and Functionality. Full screening services are also available.

PMI designs and manufactures a variety of Multi-Function Integrated Assemblies (MlAs) for commercial, industrial and military applications with operating frequency range up to 50 GHz. PMI custom designs modules and assemblies that are built to your SCD or specifications with a variety of options including integrated amplification, frequency conversion, filtering, wavelength, phase shifting, phase detection, modulation, coupling, limiting, digital control, hermetic sealing and military space screening. Phase Shifters & Bi-Phase Modulators
PMI offers the highest quality Phase Shifters and Bi-Phase Modulators for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Analogue or digital control, high phase accuracy, high speed and low insertion loss are available. Phase Shifters can cover from 0° to 360° in 1° steps, and Bi-Phase Modulators can switch from either of two-phase levels, such as 0° to 90°, 90° to 180° or 180° to 360°.

Power Dividers/Combiners (Passive & Active)
PMI offers the highest quality Power Dividers and Power Combiners for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Features include low loss, high isolation, excellent amplitude and phase balance and small package sizes. Available options include hermetic sealing, military or space screening and custom packaging.

Phase Shifters & Bi-Phase Modulators
PMI offers the highest quality Phase Shifters and Bi-Phase Modulators for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Analogue or digital control, high phase accuracy, high speed and low insertion loss are available. Phase Shifters can cover from 0° to 360° in 1° steps, and Bi-Phase Modulators can switch from either of two-phase levels, such as 0° to 90°, 90° to 180° or 180° to 360°.

Power Dividers/Combiners (Passive & Active)
PMI offers the highest quality Power Dividers and Power Combiners for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Features include low loss, high isolation, excellent amplitude and phase balance and small package sizes. Available options include hermetic sealing, military or space screening and custom packaging.

PMI designs and manufactures a variety of Multi-Function Integrated Assemblies (MlAs) for commercial, industrial and military applications with operating frequency range up to 50 GHz. PMI custom designs modules and assemblies that are built to your SCD or specifications with a variety of options including integrated amplification, frequency conversion, filtering, wavelength, phase shifting, phase detection, modulation, coupling, limiting, digital control, hermetic sealing and military space screening. Phase Shifters & Bi-Phase Modulators
PMI offers the highest quality Phase Shifters and Bi-Phase Modulators for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Analogue or digital control, high phase accuracy, high speed and low insertion loss are available. Phase Shifters can cover from 0° to 360° in 1° steps, and Bi-Phase Modulators can switch from either of two-phase levels, such as 0° to 90°, 90° to 180° or 180° to 360°.

Power Dividers/Combiners
PMI offers the highest quality Power Dividers and Power Combiners for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Features include low loss, high isolation, excellent amplitude and phase balance and small package sizes. Available options include hermetic sealing, military or space screening and custom packaging.

Phase Shifters & Bi-Phase Modulators
PMI offers the highest quality Phase Shifters and Bi-Phase Modulators for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Analogue or digital control, high phase accuracy, high speed and low insertion loss are available. Phase Shifters can cover from 0° to 360° in 1° steps, and Bi-Phase Modulators can switch from either of two-phase levels, such as 0° to 90°, 90° to 180° or 180° to 360°.

Power Dividers/Combiners
PMI offers the highest quality Power Dividers and Power Combiners for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Features include low loss, high isolation, excellent amplitude and phase balance and small package sizes. Available options include hermetic sealing, military or space screening and custom packaging.

Phase Shifters & Bi-Phase Modulators
PMI offers the highest quality Phase Shifters and Bi-Phase Modulators for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Analogue or digital control, high phase accuracy, high speed and low insertion loss are available. Phase Shifters can cover from 0° to 360° in 1° steps, and Bi-Phase Modulators can switch from either of two-phase levels, such as 0° to 90°, 90° to 180° or 180° to 360°.

Power Dividers/Combiners
PMI offers the highest quality Power Dividers and Power Combiners for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Features include low loss, high isolation, excellent amplitude and phase balance and small package sizes. Available options include hermetic sealing, military or space screening and custom packaging.
Amplifiers – Solid State

PMI offers a full-line of RF and Microwave Amplifiers that range from 250 kHz up to 50 GHz. Available in Narrow Band, Octave Band, Broadband, Multi-Octave and Ultra Broadband models. Our Amplifiers are available in a variety of types: Variable Gain, Gain Correction, Passive Gain Step, Limiting Amplifiers and High IP Amplifiers for ESM manipulation. PMI offers a variety of amplifiers for field or laboratory applications which can be designed for use with various microwave or millimeter wave electronic devices.

Attenuators – Variable / Programmable / Fixed

PMI offers a complete line of Variable Solid-state Attenuators operating up to 50 GHz, Sub-Octave and Broadband models. Either voltage or digitally Variable programmable versions are available. PMI’s Attenuators offer the industry’s best attenuation flatness vs. frequency.

Coupplers - Quadrature, 180° & Directive

PMI offers the highest quality Quadrature Couplers for commercial and military applications in the frequency range up to 18 GHz with high bandwidths, high isolation, excellent amplitude and phase balance in small package size. Design options can include hermetic sealing, military or space screening and custom packaging.

Detectors – RF/Microwave

PMI’s RF and Microwave Detector products are available in a variety of designs that include high sensitivity Schottky Diode Detectors, Low Barrier Schottky Diodes, Zero Bias Schottky Detectors and Threshold Detectors. Design options can include hermetic sealing, military or space screening and custom packaging.

DLLVs, ERDLVs & SDLVs

PMI’s Detector Logicamix Video Amplifiers (DLLVs) are offering covered DC to 40 GHz with extended range modules offering dynamic range values of 70 dB. Our standard product provides exceptional temperature stability, low noise and linearity at frequency. New DLLV and SDLV models have been recently developed. Please check with us for new DLLV and SDLV’s to meet your requirements or replace obsolete products.

DTOs, VCOs, PLOs, DROs, & Frequency Synthesizers

PMI offers military aerospace grade frequency sources in a variety of bands up to 18 GHz. Please contact us to discuss your desired specifications. PMI Frequency Sources are designed to be Form, Fit and Functional replacements for many legacy applications.

Filters & Switched Filter Banks

PMI offers the highest quality Filters, Switch Filter Banks, Filter Assemblies, Splitters and Multiplexers for commercial and military applications. The frequency range is DC to 40 GHz and the filter topologies include Lumped Element, Combline, Interdigital, Narrow Band and Delay Filters, Surface Substrate Filters, Bandpass Band Reject or Notch Filters as well as Solid Pass and High-Pass Filters. All PMI’s Switch Filter Banks use PMI’s proprietary Solid State Switch designs which offer high speed and improved performance. While there are many standard models, PMI can design and build to meet your specifications.

Form, Fit, Functional Products & Service

Are you faced with the problem of locating obsolete devices to maintain an old system? Or replacing products from vendors who are no longer available? PMI has over 30 years of experience in designing devices to replace obsolete electronic devices, while meeting or exceeding the original product’s performance. PMI uses today’s modern technology to build the best possible device, while meeting the Form, Function and Full servicing services are also available.

Frequency Discriminators & IFMs

PMI offers a full line of RF and microwave Frequency Discriminator products that range up to 40 GHz with many options available. Contact PMI to discuss your specific requirements.

IQ Vector Modulators & Single Sideband Modulators

PMI Modulators are available with high-speed modulation, low spurious emissions, low insertion loss, high phase accuracy and frequency conversion as well as standard and custom designed housings. PMI offers unique designs that cover wide bandwidths such as a single unit covering 65 MHz to 15 GHz as an example.

Integrated MIC/MMIC Assemblies (IMAs)

PMI offers the highest quality Multi-Function Integrated Microwave Assemblies and modules for commercial, industrial and military applications with operating frequency range up to 50 GHz. PMI custom design modules and assemblies that are built to your SCD or specifications with a variety of options including integrated amplification, attenuation, filtering, switching, phase shifting, power detection, modulation, coupling, limiting, digital control, hermetic sealing and military or space screening. Please contact us to discuss your specific requirements.

Monopulse Comparators

PMI designs and manufactures a variety of Coaxial Monopulse Comparators for beamforming antenna applications up to 21.2 GHz. Form, fit and functional designs can also be replicated to meet your specific requirements.

Multi-Function Integrated Assemblies (MIAs)

PMI offers the highest quality Multi-Function Integrated Microwave Assemblies and modules for commercial, industrial and military applications with operating frequency range up to 50 GHz. PMI custom design modules and assemblies that are built to your SCD or specifications with a variety of options including integrated amplification, attenuation, filtering, switching, phase shifting, power detection, modulation, coupling, limiting, digital control, hermetic sealing and military or space screening. Please contact us to discuss your specific requirements.

Phase Shifters & Bi-Phase Modulators

PMI offers the highest quality Phase Shifters and Bi-Phase Modulators for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Analog or digital control, high phase accuracy, high speed and low insertion loss are available. Phase Shifters can cover from 0° to 360° or any increment thereof for applications requiring either of two-phase levels such as: 0° to 90°, 90° to 180° or 180° to 360°.

Power Dividers/Combiners (Passive & Active)

PMI offers the highest quality Power Dividers and Power Combiners for commercial, industrial and military applications up to 40 GHz. Features include low loss, high isolation, excellent amplitude and phase balance and small package size. Available options include hermetic sealing, military or space screening and custom packaging.

Gain & Loss Equalizers

PMI offers a wide range of Equalizers that are available in narrow-bandwidths or broadband coverage. Features include insertion loss & OSNR, various frequency equalization values, and small size & standardized packaging.

Log Amplifiers

PMI IF and IF Log Amplifiers use the same technology as our famous successive detection products. PMI offers Amplifiers (SDLVxRA’s). This makes for extremely stable, linear devices operating up to 40 GHz.

Miscellaneous Products

PMI offers bias tees, isolators, mixers, active mixers, preamplifiers, and through package housings to create complete design solutions.

Monopulse Comparators

PMI designs and manufactures a variety of Coaxial Monopulse Comparators for beamforming antenna applications up to 21.2 GHz. Form, fit and functional designs can also be replicated to meet your specific requirements.

Multi-Function Integrated Assemblies (MIAs)

PMI offers the highest quality Multi-Function Integrated Microwave Assemblies and modules for commercial, industrial and military applications with operating frequency range up to 50 GHz. PMI custom design modules and assemblies that are built to your SCD or specifications with a variety of options including integrated amplification, attenuation, filtering, switching, phase shifting, power detection, modulation, coupling, limiting, digital control, hermetic sealing and military or space screening. Please contact us to discuss your specific requirements.

Phase Shifters & Bi-Phase Modulators

PMI offers the highest quality Phase Shifters and Bi-Phase Modulators for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Analog or digital control, high phase accuracy, high speed and low insertion loss are available. Phase Shifters can cover from 0° to 360° or any increment thereof for applications requiring either of two-phase levels such as: 0° to 90°, 90° to 180° or 180° to 360°.

Power Dividers/Combiners (Passive & Active)

PMI offers the highest quality Power Dividers and Power Combiners for commercial, industrial and military applications up to 40 GHz. Features include low loss, high isolation, excellent amplitude and phase balance and small package size. Available options include hermetic sealing, military or space screening and custom packaging.

Gain & Loss Equalizers

PMI offers a wide range of Equalizers that are available in narrow-bandwidths or broadband coverage. Features include insertion loss & OSNR, various frequency equalization values, and small size & standardized packaging.
Amplifiers – Solid State
PMI offers a full-line of RF and Microwave Amplifiers that range from 20 kHz up to 50 GHz. Available in Narrow Band, Sub-band, Broadband, Multi-Octave and Ultra-broadband Models. Our Amplifiers are available in a variety of types: Variable Gain, Gain Correction, Passive Gain Stabil, Limiting-Amplifiers and High IP Amplifiers for SWR-matched, Portable Test-Bench Amplifiers for mobile or laboratory applications which can be designed for use with various commercial and military applications. The frequency range is DC to 50 GHz and the filter topology includes Lumped Element, Combline, Interdigital, Nanocap and Ceramic Filters, Surface Substrate Filters, Bandstop Band rejection, Triple Filter as well as Slow-Pass and High-Pass Filters. All PMI’s Switch Filter Banks use PMI’s proprietary solid-state Switch design which offers high speed and improved performance. PMI’s Switched Filter Banks are designed to meet your specific requirements.

Filters & Switched Filter Banks
PMI offers the highest quality Filters, Switch Filter Banks, Filter Assemblies, VCO’s and Multi-function Modules for both commercial and military applications. The frequency range is DC to 50 GHz and the filter topology includes Lumped Element, Combined, Interdigital, Nanocap and Ceramic Filters, Surface Substrate Filters, Bandstop Band rejection, Triple Filter as well as Slow-Pass and High-Pass Filters. All PMI’s Switch Filter Banks use PMI’s proprietary solid-state Switch design which offers high speed and improved performance. PMI’s Switch Filter Banks are designed to meet your specific requirements.

Detectors – RF/Microwave
PMI’s RF and Microwave Detector products are available in a variety of designs that include high sensitivity Successive Diode Detectors, Low Barrier Schottky Diodes, Zero Bias Schottky Detectors and Threshold Detectors (Fixed and Adjustable Threshold Levels, input power levels from -60 to +5 dBm and either ECL or TTL outputs). Features include frequency coverage up to 40 GHz, connected or surface mount, connector options and hermetic sealing, military or space screening and custom packaging.

DVsAs, ERDLVAs & SDLVAs
PMI’s Detector Logarithmic Video Amplifiers (DLVA’s) are offered covering DC to 40 GHz with extended range models offering dynamic ranges over 70 dB. Our standard product provides exceptional temperature stability, low ILR and low noise performance. New DLVA and SDLVA models have been recently developed. Please check with us for information on our DLVAs and SDLVAs to meet your requirements or replace obsolete products.

Power Dividers/Combiners (Passive & Active)
PMI offers the highest quality Multi-Function Integrated Microwave Assemblies and modules for commercial, industrial and military applications with operating frequency range up to 50 GHz. PMI’s custom designs modules and assemblies that are built to your SCD or specifications with a variety of options including integrated amplification, attenuators, filters, matching, phase shifting, phase inverter, detector, modulation, coupling, limiting, digital control, hermetic sealing and military or space screening. PMI offers high quality Power Divider/Combiners. PMI is your specialty for Power Dividers/Combiners, passive and active!

Phase Shifters & Bi-Phase Modulators
PMI offers the highest quality Phase Shifters and Bi-Phase Modulators for commercial, industrial and military applications in the frequency range from a few MHz up to 40 GHz. Analog or digital control, high phase accuracy, high speed and low insertion loss are available. Phase Shifters can cover from 0° to 360°. Bi-Phase Modulators provide phase shifting of either two-phase levels such as: 0° to 90°, 90° to 180° or 180° to 360°.

Microwave & Millimeter Wave
PMI offers a variety of Limiters covering the DC to 50 GHz frequency range. Phase Limiters offer low loss, low leakage levels, high peak power handling, small size & standardized packaging. Available options include surface mount or connectorized: form, fit & function, choice of connectors, hermetic sealing, military or space screening and custom packaging.

Limiters – RF / Microwave / mmWave
PMI offers the highest quality Filters, Switch Filter Banks, Filter Assemblies, VCO’s and Multi-function Modules for both commercial and military applications. The frequency range is DC to 50 GHz and the filter topology includes Lumped Element, Combined, Interdigital, Nanocap and Ceramic Filters, Surface Substrate Filters, Bandstop Band rejection, Triple Filter as well as Slow-Pass and High-Pass Filters. All PMI’s Switch Filter Banks use PMI’s proprietary solid-state Switch design which offers high speed and improved performance. PMI’s Switch Filter Banks are designed to meet your specific requirements.

Form, Fit, Functional Products & Service
Are you faced with the problem of locating obsolete devices to maintain an old system? Or replacing products from vendors who are no longer available? PMI offers over 30 years of experience designing replacement devices, obsolete electronic devices, while meeting or exceeding the original product’s performance. PMI uses today’s modern technology to build the latest electronic devices while meeting the Form, Fit and Functionality. Full screening services are also available.

Frequency Discriminators & IFMs
PMI offers a full-line of RF and microwave Frequency Discriminator products that range up to 40 GHz with many options available. Contact PMI to discuss your specific requirements.

IQ Vector Modulators & Single Sideband Modulators
PMI Modulators are available with high-speed modulation, low spurious response, low inserption loss and high phase accuracy and frequency consumption as well as standard and custom designed housings. PMI offers unique designs that cover wide bandwidths such as a single unit covering 40 MHz to 15 GHz as an example.

Integrated MIC/MMIC Assemblies (IMAs)
PMI offers the highest quality Multi-Function Modulated Microwave Integrated Assemblies for commercial, industrial and military applications in the frequency range up to 50 GHz. PMI custom designs modules and assemblies for commercial, industrial and military applications with operating frequency range up to 50 GHz. PMI custom designs modules and assemblies that are built to your SCD or specifications with a variety of options including integrated amplification, attenuators, filters, matching, phase shifting, phase inverter, detector, modulation, coupling, limiting, digital control, hermetic sealing and military or space screening. PMI offers high quality Phase Shifters and Bi-Phase Modulators. PMI is your specialty for Phase Shifters and Bi-Phase Modulators, passive and active!

Gain & Loss Equalizers
PMI offers a wide range of Equalizers that are available in narrow-bandwidths to broad bandwidths. Features include: low loss & VSOF, various frequency equalization values, and small size & standardized packaging.

Log Amplifiers
PMI IF and RF Log Amplifiers use the same technology as our famous successive Diode Detectors (SDLVAs). This makes for extremely stable, linear devices operating up to 40 GHz.

Miscellaneous Products
PMI offers bias tees, isolators, mixers, active mixers, preselectors, and through package housings to offer complete design solutions.

Monopulse Comparators
PMI designs and manufactures a variety of Coarse Monopulse Comparators for beamforming antenna applications up to 21.2 GHz. Form, fit and functional designs have been replicated to meet your specific requirements.

Multi-Function Integrated Assemblies (MIA's)
PMI offers the highest quality Multi-Function Integrated Microwave Assemblies and modules for commercial, industrial and military applications with operating frequency range up to 50 GHz. PMI custom designs modules and assemblies that are built to your SCD or specifications with a variety of options including integrated amplification, attenuators, filters, matching, phase shifting, phase inverter, detector, modulation, coupling, limiting, digital control, hermetic sealing and military or space screening. PMI offers high quality Multi-Function Integrated Microwave Assemblies. PMI is your specialty for Multi-Function Integrated Microwave Assemblies and modules!
PMI offers the highest quality RF and Microwave Control Products and Amplifiers.

**USB Controlled & Powered Products**

PMI offers various RF and Microwave products that range from 250 kHz up to 56 GHz, which are supplied in a ruggedized chassis. Our ruggedized, military grade chassis products are built to meet your exact application needs. Various functions can be offered including: Amplification, Attenuation, Switching, Power Detection/Reflected Power Detection, Phase Shifting/Phase Modulation, Pulse Modulation, Noise Generation, RF Filtering, RF Limiter, Power Splitting as well as RF Signal Distribution. Send us your Block Diagram for review and PMI will offer you a turn-key solution.

**SMT & QFN Products**

PMI offers custom surface mount and QFN packaging for many types of devices, including: Limiters, Log Amplifiers, Phase Shifters, Attenuators, Switches and Low Noise Amplifiers. PMI also offers multifunction options in a single QFN package such as: Limiter/LNA or LNA/Detector. Let PMI offer you a custom solution to reduce the size of your PCB layout.

**Switches – Solid State, Switch Matrices & Pulse Modulators**

PMI’s line of RF, Microwave and mmWave Solid State Switches covers the frequency range of up to 56 GHz in many standard models with several options available: Ultra-Broadband, Ultra-High Isolation, Low Loss, Low Video Transients, Ultra-High Switching Speed, Very Low Power Consumption, SPST through SP4T, Reflective or Absorptive and available in very small packaging. While all Switch products are available connectorized, many are also available in drop-in configuration.

**Switch Matrices**

PMI Switch Matrix products can be supplied as 4 x 4, 8 x 8, 16 x 16 or 32 x 32 blocking or non-blocking matrices and operate up to 56 GHz. Options include switching control via TTL, RS232, RS422/485, Ethernet and/or front panel touch screen LCD. Units can be supplied in a ruggedized 1U or 1U and 1/2 Chassis. Custom designs are welcome.

PMI designs and manufactures a wide variety of high frequency Receiver Front Ends and Transceivers for state-of-the-art applications. PMI is developing and offering systems that interface with Open VPK architecture and use VITA 67 high frequency interconnects. Standard models are available. PMI can also design a device to meet your specific requirements.

**Rack & Chassis Mount Products**

PMI provides solutions and products that will ensure your program’s success. You can rely on PMI to be a supportive, resourceful and technical business partner for all of your RF & Microwave requirements from DC to 65 GHz.

**SMT & QFN Products**

PMI offers various RF and Microwave products that range from 250 kHz up to 56 GHz, which are supplied in a ruggedized chassis. Our ruggedized, military grade chassis products are built to meet your exact application needs. Various functions can be offered including: Amplification, Attenuation, Switching, Power Detection/Reflected Power Detection, Phase Shifting/Phase Modulation, Pulse Modulation, Noise Generation, RF Filtering, RF Limiter, Power Splitting as well as RF Signal Distribution. Send us your Block Diagram for review and PMI will offer you a turn-key solution.

**SMT & QFN Products**

PMI offers custom surface mount and QFN packaging for many types of devices, including: Limiters, Log Amplifiers, Phase Shifters, Attenuators, Switches and Low Noise Amplifiers. PMI also offers multifunction options in a single QFN package such as: Limiter/LNA or LNA/Detector. Let PMI offer you a custom solution to reduce the size of your PCB layout.

**Switches – Solid State, Switch Matrices & Pulse Modulators**

PMI’s line of RF, Microwave and mmWave Solid State Switches covers the frequency range of up to 56 GHz in many standard models with several options available: Ultra-Broadband, Ultra-High Isolation, Low Loss, Low Video Transients, Ultra-High Switching Speed, Very Low Power Consumption, SPST through SP4T, Reflective or Absorptive and available in very small packaging. While all Switch products are available connectorized, many are also available in drop-in configuration.

**Switch Matrices**

PMI Switch Matrix products can be supplied as 4 x 4, 8 x 8, 16 x 16 or 32 x 32 blocking or non-blocking matrices and operate up to 56 GHz. Options include switching control via TTL, RS232, RS422/485, Ethernet and/or front panel touch screen LCD. Units can be supplied in a ruggedized 1U or 1U and 1/2 Chassis. Custom designs are welcome.

**USB Controlled & Powered Products**

PMI offers the highest quality RF and Microwave Control Products and Amplifiers that are self-contained within a small package, operate up to 40 GHz and receive all control commands and DC power via a built-in USB port. PMI provides a GUI that can be installed on a Windows based PC which allows control of the various switches and attenuators. Additional products can be supplied, including Phase Shifters, Bi-Phase Modulators, I/Q Modulators, Pulse Modulators, Oscillators, Detectors, and Threshold Detectors.

Our Mission: Define and deliver the future of mission-critical electronics.
PMI designs and manufactures a wide variety of high-frequency Receiver Front Ends and Transceivers for state-of-the-art applications. PMI is developing and offering these systems that interface with Open VPX architecture and use VITA 67 high frequency interconnects. Standard models are available. PMI can also design a device to meet your specific requirements.

Switches – Solid State, Switch Matrices & Pulse Modulators

PMI’s line of RF, Microwave and mmWave Solid State Switches covers the frequency range of up to 56 GHz in many standard models with several options available: Limiters/LNA or LNA/Detector. Let PMI offer you a custom solution to meet your specific requirements.

Noise Amplifiers. PMI also offers multifunction options in a single QFN package including SDLVAs, Log Amplifiers, Phase Shifters, Attenuators, Switches and Low Noise Amplifiers. PMI also offers custom surface mount and QFN packaging for many types of devices, including SDLVAs, Log Amplifiers, Phase Shifters, Attenuators, Switches and Low Noise Amplifiers. PMI also offers multifunction options in a single QFN package such as Limiters/LNA or LNA/Detector. Let PMI offer you a custom solution to reduce the size of your PCB layout.

USB Products

PMI offers USB Controlled & Powered Products that range from 250 kHz up to 40 GHz, which are supplied in a ruggedized chassis. Our ruggedized, military grade chassis products are built to meet your exact application needs. Various functions can be offered including: Amplification, Attenuation, Switching, Power Detection/Reflection Detection, Phase Shifting/Phase Modulation, Pulse Modulation, Noise Generation, RF Filtering, RF Limiting, Power Splitting as well as RF Signal Distribution. Send us your Block Diagram for review and PMI will offer you a turn-key solution.

Design & Integration Capability

PMI offers the highest quality RF and Microwave Control Products and Amplifiers that are self-contained within a small package, operate up to 40 GHz and receive all control commands and DC power via a built-in USB port. PMI provides a GUI that can be installed on a Windows PC which allows control of the various switches and attenuators. Additional products can be supplied, including Phase Shifters, Bi-Phase Modulators, IQ Modulators, Pulse Modulators, Oscillators, Detectors, and Threshold Detectors.

Amplifiers – Solid State

PMI provides amplifiers that are self-contained within a small package, operate up to 40 GHz and receive all control commands and DC power via a built-in USB port. PMI provides a GUI that can be installed on a Windows PC which allows control of the various switches and attenuators. Additional products can be supplied, including Phase Shifters, Bi-Phase Modulators, IQ Modulators, Pulse Modulators, Oscillators, Detectors, and Threshold Detectors.

Receiver Front Ends & Transceivers

PMI offers various RF and Microwave products that range from 250 kHz up to 40 GHz, which are supplied in a ruggedized chassis. Our ruggedized, military grade chassis products are built to meet your exact application needs. Various functions can be offered including: Amplification, Attenuation, Switching, Power Detection/Reflection Detection, Phase Shifting/Phase Modulation, Pulse Modulation, Noise Generation, RF Filtering, RF Limiting, Power Splitting as well as RF Signal Distribution. Send us your Block Diagram for review and PMI will offer you a turn-key solution.

SMT & QFN Products

PMI offers various RF and Microwave products that range from 250 kHz up to 40 GHz, which are supplied in a ruggedized chassis. Our ruggedized, military grade chassis products are built to meet your exact application needs. Various functions can be offered including: Amplification, Attenuation, Switching, Power Detection/Reflection Detection, Phase Shifting/Phase Modulation, Pulse Modulation, Noise Generation, RF Filtering, RF Limiting, Power Splitting as well as RF Signal Distribution. Send us your Block Diagram for review and PMI will offer you a turn-key solution.

Switch Filter Banks

PMI Switch Filter Banks are self-contained within a small package, operate up to 40 GHz and receive all control commands and DC power via a built-in USB port. PMI provides a GUI that can be installed on a Windows PC which allows control of the various switches and attenuators. Additional products can be supplied, including Phase Shifters, Bi-Phase Modulators, IQ Modulators, Pulse Modulators, Oscillators, Detectors, and Threshold Detectors.

Receiver Filters

PMI Receiver Filters are self-contained within a small package, operate up to 40 GHz and receive all control commands and DC power via a built-in USB port. PMI provides a GUI that can be installed on a Windows PC which allows control of the various switches and attenuators. Additional products can be supplied, including Phase Shifters, Bi-Phase Modulators, IQ Modulators, Pulse Modulators, Oscillators, Detectors, and Threshold Detectors.

Amplifiers – Solid State

PMI provides amplifiers that are self-contained within a small package, operate up to 40 GHz and receive all control commands and DC power via a built-in USB port. PMI provides a GUI that can be installed on a Windows PC which allows control of the various switches and attenuators. Additional products can be supplied, including Phase Shifters, Bi-Phase Modulators, IQ Modulators, Pulse Modulators, Oscillators, Detectors, and Threshold Detectors.

RF Limiting

PMI offers the highest quality RF and Microwave Control Products and Amplifiers that are self-contained within a small package, operate up to 40 GHz and receive all control commands and DC power via a built-in USB port. PMI provides a GUI that can be installed on a Windows PC which allows control of the various switches and attenuators. Additional products can be supplied, including Phase Shifters, Bi-Phase Modulators, IQ Modulators, Pulse Modulators, Oscillators, Detectors, and Threshold Detectors.

Threshold Detectors

PMI offers Threshold Detectors that are self-contained within a small package, operate up to 40 GHz and receive all control commands and DC power via a built-in USB port. PMI provides a GUI that can be installed on a Windows PC which allows control of the various switches and attenuators. Additional products can be supplied, including Phase Shifters, Bi-Phase Modulators, IQ Modulators, Pulse Modulators, Oscillators, Detectors, and Threshold Detectors.