

High Power (7W) OEM 300 MHz Wireless Modem

For the ultimate solution in design flexibility and size sensitive applications, consider the PicoPRO-300 radio platform. Offering up to 7W of output power in the 310 - 390 MHz Frequency Band the PicoPRO-300 offers the design flexibility, features, and performance never seen before!

Up to 345 kbps

310 - 390 MHz

Up to 7 Watts

Extended Temperature

Dual Serial Ports

Excellent Sensitivity

Weighs only 12 grams!



1.05" X 2.0" X 0.11"

Features

- Supports up to 345 kbps
- Up to 7W transmit power (Adjustable)
- Multi Stage, SAW Filters provide extreme noise and interference rejection
- Point-to-Point, Point-to-Multipoint, TDMA Topology Support
- Master, Remote & Repeater Modes
- Industrial Temperature (-55C to +85C)
- Low Power consumption in Sleep and Sniff modes (Future)
- 32 bits of CRC, selectable Forward Error Correction with retransmission
- Separate diagnostics port—transparent remote diagnosis and online network control
- Small Footprint (26.5 x 51 x 2.9mm | 1.05 x 2.0 x 0.11")

Enclosed Option



Specifications

Spreading Method / Modulation Scheme	Frequency Hopping (1W) Fixed Channel (7W*) Frequency Hopping w/ export permit (7W*)	Frequency 310 to 390 MHz (Frequency Hopping)*		
		Rate (kbps)	Sensitivity (dBm)	Bandwidth (kHz)
Forward Error Correction	Hamming, BCH, Golay, Reed-Solomon	19.2	-120	25
Error Detection	32 bits of CRC, ARQ	24.7	-119	25
Encryption	Optional	56	-117	60
		115.2	-114	150
Range	Up to 60 miles (100 km)	172.8	-113	180
		230.4	-111	230
Serial Interface	3.3V CMOS (OEM) RS232/485 (Selectable)	276.4	-110	230
		345	-106	400
Serial Baud Rate	300 bps to 230 kbps			
Operating Modes	Point-to-Point, Point-to-Multipoint, Store & Forward Repeater, TDMA			
Signals Interface	RSSI LEDs, Tx/Rx LEDs, Reset, Config, Wake-up, RSmode, 4 Digital Inputs/Outputs, 1 Analog Input, 1 Analog Output			
Remote Diagnostics	Battery Voltage, Temperature, RSSI, Packet Statistics			
Core Voltage	OEM	Vcc: 3.3 - 3.6 VDC Vrf: 5 VDC (4000mA)		
	Enclosed	12-30VDC		
Connectors	OEM	Antenna: UFL Data: 116 Pin SMT		
	Enclosed	Antenna: RP-SMA Female Bulkhead Data: DB9-F USB: MicroUSB Power: 4 Pin Quick Connect		
Environmental	-55°C - +85°C 5-95% humidity, non-condensing			
Weight	OEM	~ 12 grams		
	Enclosed	~225 grams		
Dimensions	OEM	Approx. 1.05" x 2.0" x .11" (26.5mm x 51mm x 2.8mm)		
	Enclosed	Approx. 3.0" x 3.5" x 1.125" (76mm x 90mm x 28.5mm)		

Order Options

PicoPRO-300	Base Model (Fixed Freq (7w), Hopping Freq (1W), No AES Encryption)
-C1S	Fixed Freq (7W), Hopping Freq (1W), AES256**
-C2S	Fixed Freq (7W), Hopping Freq (7W), AES256**
-ENC	Enclosed Model

**AES encryption, 7W frequency hopping requires Export Permit

*Requires heat sink/cooling solution

Contact Information

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Specifications subject to change without notice.

For more information please contact:



BOCK OPTRONICS INC.

14 Steinway Blvd., Unit 7
Toronto, Ontario M9W 6M6

Tel: (416) 674-2804
sales@bockoptronics.ca
www.bockoptronics.ca



www.microhardcorp.com

High Power (7W) OEM 900 MHz Wireless Modem

For the ultimate solution in design flexibility and size sensitive applications, consider the PicoPRO-900 radio platform. Offering up to 7W of output power in the 900 MHz Band the PicoPRO-900 offers the design flexibility, features, and performance never seen before!

Up to 345 kbps

900 MHz

Up to 7 Watts

Extended Temperature

Dual Serial Ports

Excellent Sensitivity

Weighs only 12 grams!



1.05" X 2.0" X 0.11"

Features

- Supports up to 345 kbps
- Up to 7W transmit power (Adjustable)
- Multi Stage, SAW Filters provide extreme noise and interference rejection
- Point-to-Point, Point-to-Multipoint, TDMA Topology Support
- Master, Remote & Repeater Modes
- Industrial Temperature (-55C to +85C)
- Low Power consumption in Sleep and Sniff modes (Future)
- 32 bits of CRC, selectable Forward Error Correction with retransmission
- Separate diagnostics port—transparent remote diagnosis and online network control
- Small Footprint (26.5 x 51 x 2.9mm | 1.05 x 2.0 x 0.11")

Enclosed Option



Specifications

Spreading Method / Modulation Scheme	Frequency Hopping (1W) Fixed Channel (7W*) Frequency Hopping w/ export permit (7W*)	Frequency 902 to 928 MHz (Frequency Hopping)*		
		Rate (kbps)	Sensitivity (dBm)	Bandwidth (kHz)
Forward Error Correction	Hamming, BCH, Golay, Reed-Solomon	19.2	-120	25
Error Detection	32 bits of CRC, ARQ	24.7	-119	25
Encryption	Optional	56	-117	60
		115.2	-114	150
Range	Up to 60 miles (100 km)	172.8	-113	180
		230.4	-111	230
Serial Interface	3.3V CMOS (OEM) RS232/485 (Selectable)	276.4	-110	230
		345	-106	400
Serial Baud Rate	300 bps to 230 kbps			
Operating Modes	Point-to-Point, Point-to-Multipoint, Store & Forward Repeater, TDMA			
Signals Interface	RSSI LEDs, Tx/Rx LEDs, Reset, Config, Wake-up, RSmode, 4 Digital Inputs/Outputs, 1 Analog Input, 1 Analog Output			
Remote Diagnostics	Battery Voltage, Temperature, RSSI, Packet Statistics			
Core Voltage	OEM	Vcc: 3.3 - 3.6 VDC Vrf: 5 VDC (4000mA)		
	Enclosed	12-30VDC		
Connectors	OEM	Antenna: UFL Data: 116 Pin SMT		
	Enclosed	Antenna: RP-SMA Female Bulkhead Data: DB9-F USB: MicroUSB Power: 4 Pin Quick Connect		
Environmental	-55°C - +85°C 5-95% humidity, non-condensing			
Weight	OEM	~ 12 grams		
	Enclosed	~225 grams		
Dimensions	OEM	Approx. 1.05" x 2.0" x .11" (26.5mm x 51mm x 2.8mm)		
	Enclosed	Approx. 3.0" x 3.5" x 1.125" (76mm x 90mm x 28.5mm)		

Order Options

PicoPRO-900	Base Model (Fixed Freq (7w), Hopping Freq (1W), No AES Encryption)
-C1S	Fixed Freq (7W), Hopping Freq (1W), AES256**
-C2S	Fixed Freq (7W), Hopping Freq (7W), AES256**
-ENC	Enclosed Model

**AES encryption, 7W frequency hopping requires Export Permit

**Requires heat sink/cooling solution*

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