



## MobilFind Features & Specifications

MobilFind, a system that supports both commercial and domestic vehicle needs. The system is an fleet management asset tracker based on the latest technology and includes a list of standard features and capabilities. The module is recommended for dry compartment installation for all types of vehicles.

Together with MATCO's multi-use multi-function highly intuitive Internet web application formulates a well rounded out tool for any discerning requirement.

The system is an "Always On" technology that takes advantage of a true automotive OEM designed system. Standby power is said to be the lowest in the industry for "Always On" technology. There is no waiting for connection as is the case with Microburst and LEO satellite based systems. There are three models, Lite, Standard and Plus. The Lite model is the basic unit with the essentials, the Standard model includes Ignition Inhibit and two user Inputs and Outputs, the Plus model includes additional Inputs.

The system utilizes low cost GSM GPRS or CDMA 1x data technology to move information back and forth from the module to the MATCO data system and vice versa. The system installs in less than 1-1/2 hours for a full implementation and less than 20 minutes for a basic installation. The system is an "Event" (Alerts) driven system with model specific optional Inputs and Outputs that can be labeled and logic configured over the air.

MATCO offer wireless plans for all of our products, from minimum usage users per month to high volume usage and tailored plans to suit the user's needs.

## Summary of Features

- Automotive compliant, 12 or 24 VDC systems, negative ground.
- Meets or exceeds relevant SAE specifications.
- GSM Quad Band or CDMA version available.
- True "Event", (Alerts) driven system.
- True Polygon Geo-Barrier capability, locked to Geo-Barrier or out of, selectable per Geo-Barrier.
- Full "Alerts" notification sent to user's E-mail, Cellular Handphone, Pager, or any web enabled device and/or optional secure communication to user's own monitoring alarm service.
- Standard multi plane motion detection.
- Alarm signal input from vehicle's existing alarm system.
- Roadside assistance input and optional available panel mount switch.
- Full time diagnostics, full reporting capabilities.
- Power miser circuitry, ignition off automatically reduces power to absolute minimum.
- Full featured user command set over the air;

## Features, (over the air programming)

- Ignition Inhibit,
- Variable Reporting Time Interval,
- Variable High Speed Reporting Time Interval,
- Motion Detection,
- User Configurable Inputs and Outputs,
- Idle Timer, DOT Compliance
- Service Interval Minders,
- Vehicle Status, Onboard Diagnostics
- Speeding Notifications
- True Polygon Geo-Barrier
- Full Module Reset

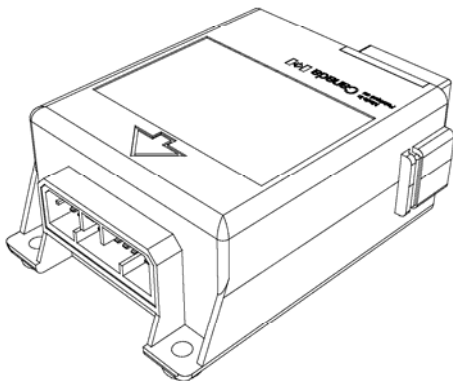


Figure 1, Multifunction Control Module, typical module.

## Specifications

### Environmental & Electrical,

Parameter	Minimum	Typical	Maximum	Unit
Supply Voltage, J1, Pin 14, (+V <sub>BATT</sub> )	9		36	V <sub>DC</sub>
Operational Current, (I <sub>OPER</sub> )	40		2,200 <sub>(PEAK)</sub>	mA <sub>DC</sub>
Quiescent Current, (I <sub>Q TYP</sub> )	8	15		mA <sub>DC</sub>
Operating Temperature Range, (T <sub>OPER</sub> )	-20		+60	°C
Storage Temperature range, (T <sub>STORAGE</sub> )	-30		+80	°C
Environmental, Humidity, Non-condensing at +40 °C, (RH <sub>NC</sub> )			95	%

### RF Modem,

Parameter	Comment
Wavecom WISMO Quik 24 Series	World GSM Compliant,
Dual Band EGSM/GPRS module (EGSM 850/1800 MHz).	Designed for M2M Asset Applications
Compliant with ETSI GSM Phase 2+ Standard	
Class 4, 2W @ 850 MHz,	
Class 1, 1W @ 1800 MHz,	
Environmental,	See above

- CDMA is carrier specific, specifications for CDMA shall be provided upon request.

### GPS Receiver,

Parameter	Minimum	Typical	Maximum	Unit
Channels, Parallel Tracking			12	Each
Operational Frequency, L1		1575		MHZ
Position Accuracy				
Stand alone, (CEP, SA off)		3		Metres
Differential <sup>1</sup>		1		Metre
Time To First Fix				
Obscuration Recovery <sup>2</sup>		1		Seconds
Hot Start <sup>3</sup>		<3		Seconds
Warm Start <sup>4</sup>		<32		Seconds
Autonomous/Cold <sup>5</sup>		<60		Seconds
Power-off start <sup>6</sup>		varying		Seconds
Antenna Supply, I <sub>max</sub> =50mADC	0.5		5.2	V <sub>DC</sub>
Antenna Current Monitor, I <sub>ant</sub>	9	16		mA <sub>DC</sub>

1. Assumes a benign multi-path environment and differential corrections once per second.
2. The receiver's calibrated clock is not stopped, thus it knows precise time to the uSec level.
3. The receiver has estimates of time/date/position and valid almanac and ephemeris data.
4. The receiver has estimates of time/date/position and almanac.
5. The receiver has no estimates of time/date/position and no recent almanac.
6. Receiver is powered "Off", clock stops. Start-up depends on time to power-on and power-on location.

### Electrical Input and Output Signals,

J1, Pin No.	Type	Assertion	Min	Max	Unit
4	Output	Interruption Signal Output, <i>Active Hi</i> <sup>AB</sup>	+V <sub>BATT</sub> -1V <sub>DC</sub>		V <sub>DC</sub>
5	Input	Ignition Signal Input, <i>Active Hi</i>	+V <sub>BATT</sub> /2	+V <sub>BATT</sub> +0.5V <sub>DC</sub>	V <sub>DC</sub>
6	Input	Alarm Signal Input, <i>Active Lo</i> <sup>AB</sup>		1	V <sub>DC</sub>
7	Input	Factory Input, <i>Active Lo</i> ( <b>Do Not Use Under Normal Use</b> )		1	V <sub>DC</sub>
8	Output	Aux 1 Output Signal, Current Sink, ( <i>Configurable</i> ) <sup>AB</sup>		100	mA <sub>DC</sub>
9	Input	Negative Battery Input, <i>Ground</i>			GND
10	Input	Aux 1 Input Signal, <i>Active Lo</i> <sup>AB</sup>		1	V <sub>DC</sub>
11	Input	Aux 2 Input Signal, <i>Active Lo</i> <sup>AB</sup>		1	V <sub>DC</sub>
12	Output	Aux 2 Output Signal, Current Sink, ( <i>Configurable</i> ) <sup>AB</sup>		100	mA <sub>DC</sub>
13	Input	Aux 3 Input Signal, <i>Active Lo</i> <sup>A</sup>		1	V <sub>DC</sub>
14	Input	Positive Battery <i>Input</i>	9	36	V <sub>DC</sub>
15	N/C				
16	N/C				
17	Output	Negative Battery Input, <i>Ground</i>			GND
18	Output	Positive Battery <i>Input</i>	9	36	V <sub>DC</sub>
19	Input	Aux 4 Input Signal, <i>Active Lo</i> <sup>A</sup>		1	V <sub>DC</sub>
20	Input	Roadside Assistance Switch Input, <i>Active Lo</i>		1	V <sub>DC</sub>

- J1, refers to main module connector.
- Pin 8, 12, Aux 1 & 2 Output Signals are user configurable over the air, (see Installation Instructions).
- Listed above is list of features available, certain features are model specific, "A" defines features included with the Plus and "B" features included with the Standard model.

### Mechanical,

Parameter	Specifics	Unit
Module Dimensions, (LxWxD)	117 x 79 x 46.5, (three point mounting)	mm
Module Weight	<190 (excluding wire harness and antennas).	grams
Module Housing, Engineered Plastic Blend	Custom designed and manufactured to MATCO Spec.	

### Miscellaneous,

- Antenna(s), Cellular and GPS are incorporated as combo antenna unit, included with kit, optional antenna configurations available consult MATCO.
- Motion detection is based on single point element all directions.
- Unit shipped with mounting kit combo antenna and instruction warranty booklet and installed SIM card.
- Consult MATCO for all other possible configurations and pricing.

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