Technical Data Sheet

MOVUS
SMARTER MACHINE MONITORING

PRODUCT: FITPOWER | **PART NUMBER (PN):** FPBLE1.0

Non-Invasive Power Monitoring Solution

Monitoring the operation and power of your assets is an important part of maintaining and optimising the performance of your equipment.

FitPower is a smart, self-installed sensor that monitors and measures the energy individual machines are using to show trends over time. As a completely wireless sensor, it can be safely installed any anyone, anywhere along the power cable, at any time - no specialist skills, plant shutdowns or safety gear required. And that's just the tip of the iceberg! The ones that are melting. With FitPower, we're aiming to help organisations reduce their energy consumption and reduce global warming.

KEY FEATURES

IP66 ENCLOSURE
Housing for outdoor and harsh conditions. Tested to "dust tight".

INTEGRATED WIRELESS
Uses BLE 5.3 to connect to a bluetooth gateway every 10 minutes which then sends data to the Movus Cloud.

QR CODE
QR code with unique MAC address for onboarding FitPower to Gateway and equipment.

ULTRA-LOW POWER
More than two years battery life* under normal operating conditions.

*based off 1 minute sample intervals

PROCESSING POWER
Low power module: NRF5340 wireless SoC with dual core Arm® Cortex®-M33 processors

MOUNTING
Designed for rapid deployment. Mount onto any cable greater than 9mm diameter with nothing but zip ties. Got smaller cables? No problem, we can provide an adapter.

STANDARD:
Zip Tie Mounting

ON REQUEST:
Adapter for smaller than 10mm cable diameter

ON REQUEST:
Other custom mounting options available

BLE Communication	Module	Raytac MDBT53-1M NRF5340 wireless SoC with two Arm® Cortex®-M33 processors
	Bluetooth	BLE 5.3
	Operating Temperature Range	-40°C to 105 °C extended operating temperature
	Supply Voltage	1.7-5.5V
	CPU	128/64 MHz Arm Cortex-M33
	Memory	1 MB Flash + 512 KB RAM
	Network core memory	256 KB Flash + 64 KB RAM
	Security features	Trusted execution, root-of-trust, secure key storage, 128-bit AES
	RX sensitivity	-98 dBm at 1 Mbps -95 dBm at 2 Mbps
Magnetic Field Measurement	Part Number	LIS3MDL
	Sensor technology	High-performance 3-axis magnetometer
	Frequency Range	Standard and Fast modes 100 kHz and 400 kHz
	Maximum permissible magnetic field exposure	+-16 gauss
	A/D Conversion (all)	16 bit
	Operating Temperature	-40°C to 85°C
Power	Battery Type	1 x 3.6V D Lithium Thionyl Chloride (LI-SOCI2) cell – replaceable battery
	Part Number	ER34615 Li-SOCl2
	Estimated Battery Lifetime	2 years +
	Storage Temperature	10°C to 30°C
	Battery Module	To order additional PS Battery Module, use MOVUS PN: BADcell
Environmental	Temperature	Operation -20°C to 85°C; -4°F to 140°F
	IP Class	IP66
Certifications	Raytac Module	FCC, IC, CE, Telec (MIC), KC, SRRC, NCC, RCM, WPC RoHS & Reach Compliant

Physical	Weight	0.248kg (8.75 oz)
	Case Material	ABS-Like
	Dimensions	84mm x 53mm x 49mm (3.30 in x 2.09 in x 1.93 in)
	Minimum cable diameter without adapter	15mm
	Mounting	Zip Ties