

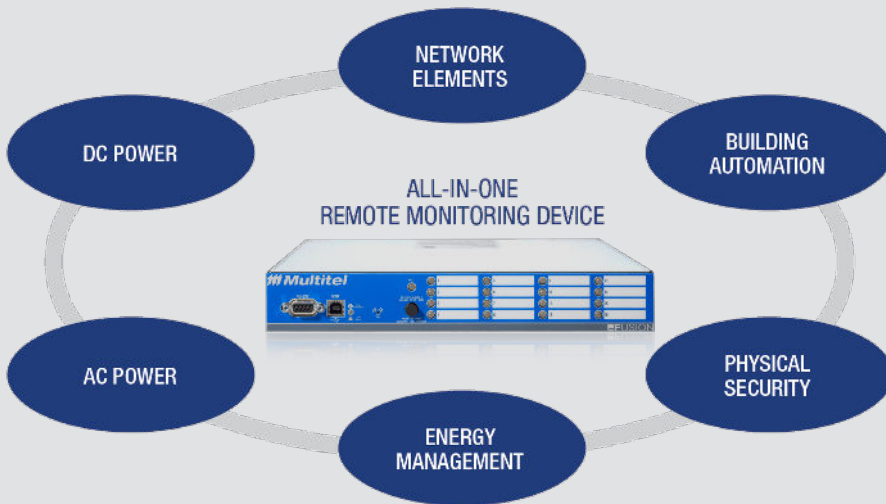


FUSION

THE ONLY ALL-IN-ONE REMOTE TELEMETRY UNIT YOU'LL EVER NEED

Do you lack the visibility of your critical remote-sites or facilities? Are you looking to gain quick access to real-time information that can help you make better decisions regarding your critical assets, such as your batteries, HVACs and generators? Are you struggling with skyrocketing costs due to repetitive trucks rolls and maintenance, associated HR expenses and equipment damage that are deeply impacting your bottom line?

Then, you need to take a look at FUSION.



FUSION's comprehensive monitoring capabilities enable you to make proactive decisions for your most important assets.

Multitel's FUSION is an affordable, all-in-one remote telemetry unit that centralizes your alarms so that you can prevent profit-gouging downtimes and unmanageable OPEX increases. FUSION eliminates the need for multiple RTUs and other monitoring devices.

Based on industry standards and protocols, FUSION ensures heightened security and compliance. It easily integrates into your existing management tools, software platforms and infrastructure.

FUSION delivers fast, easy and accurate access to real-time HMI-based dashboards and KPIs. Get deep insight into your PUE and state of health (SOH).

Multitel FUSION

BENEFITS

COST-EFFECTIVE

FUSION is an all-in-one solution that provides access to your alarms, power, buildings, and more. Our solution is the gateway to any monitoring device you need.

EASY TO USE

Thanks to its intuitive interface and connectivity with most of your existing solutions and devices, users of all levels can benefit from FUSION's HMI real-time data with absolutely no learning curves.

SECURE

FUSION is compatible with the following security standards: SNMPv3, RADIUS, HTTPS, SSH and much more.

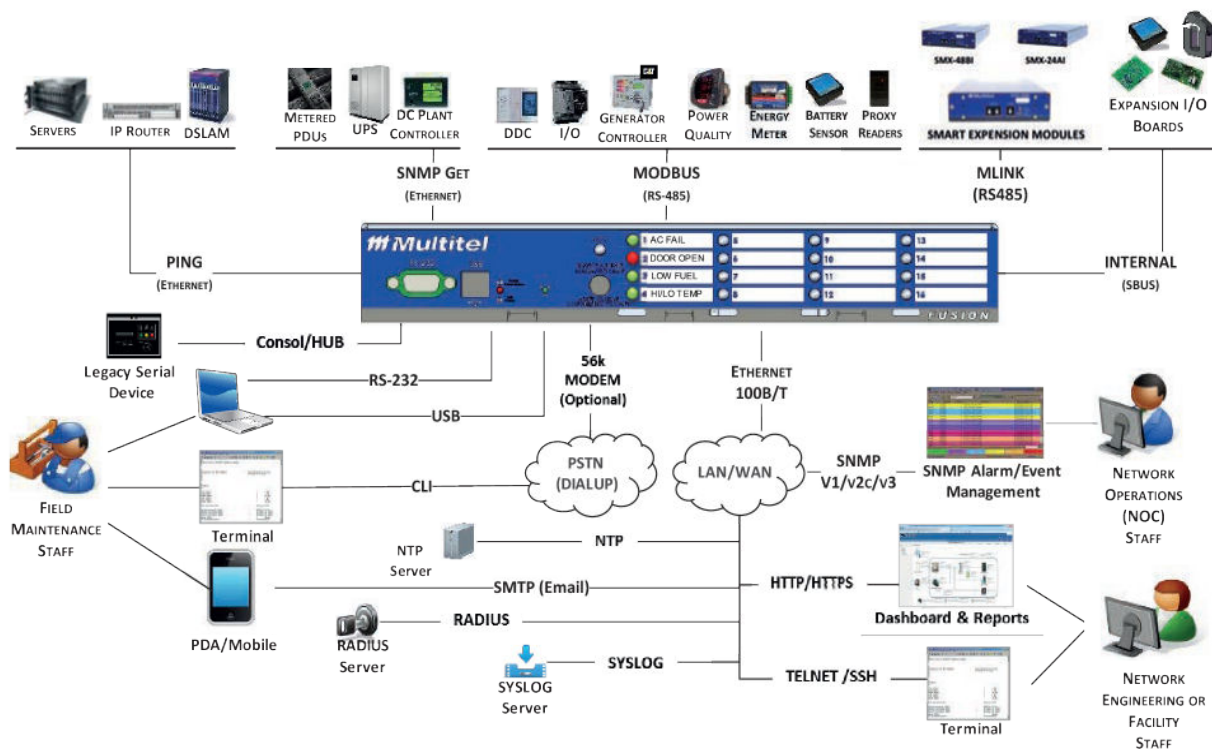
SEAMLESS CONNECTIVITY

FUSION is compliant with multiple Modbus and SNMP protocols and integrates with FIRM Suite™, IBM's NetCool™, HPoV™, Kaseya™, Cacti™, WhatsUpGold™.

SCALABLE

Add input channels at any time to evolve your monitoring solution as your business grows.

SMART, RELIABLE, FLEXIBLE AND IT-SECURED MONITORING TOOLS



MONITORING AND CONTROL CAPABILITIES

GENERAL SPECIFICATIONS

Flexible Power Supply	-40 to -60Vdc (A & B feed) 7,2 watts (120Vac is Optional)
Extended operating temperature range	-40 °C to 65 °C (-40 °F to 150 °F)
Dimension*	4.45 cm X 27.9 cm X 26.6 cm (1.75 in. X 11 in. X 10.5 in.)
Weight	2.7 kg (6 lb)

EXPANSION I/O MODULES

Analog Inputs	Up to 11 channels (0-60Vdc, 0-10Vdc, 50mV, AC Volts, AC Current, Temperature, Humidity)
Binary Inputs	Up to 64 channels referenced
Binary Outputs	Up to 8 relays
MODBUS Modules	Up to 64 modules
Intelligent I/O Expansion	18 analog channels - ANALOG Card, 48 binary input channels – SMX-48BI MODULE (Modbus), 32 relay channels - OUTPUT Card
MODBUS I/O Expansion	Performed by a distributed architecture of up to 30 Intelligent I/O cards and/or up to 64 ModBus modules

COMMUNICATION / NETWORK INTEGRATION

Front Panel Display (Optional)	16 DELs 3 colors including audible alarm
Serial Ports	2 RS-232 ports and 2 RS-485 ports(115kbps max) Console (Hub) mode is supported
USB	Yes
Modem (Optional)	56 kbps
Integrated Ethernet	Auto MDIX; 10/100 Mbit and 10 simultaneous users
Serial Protocols	MODBUS, TL1 (partial), Intelligent ASCII messaging, ISNMS, MLINK
IP Protocols	HTTP, HTTPS, SNMP v1/v2c/v3, SMTP (email), TELNET, SSH, SNMP Get, PING, RADIUS, SYSLOG, NTP
Languages	English and French

EMBEDDED SOFTWARE

File Transfer simple and user-friendly	Source code, statistics, historic, HMI views and configuration
Daily statistics recordings (Daily)	High, Low, Delta & Average for the last 32 days for all real and derived channels
Detailed data recordings (Trending)	10 files of each 25 channels and 2000 samples each
Histogram data recording (Histo)	10 Histogram files, 1 to 58 Bins
History data recordings (Events)	HISTORY file = 80 000 logs, 8000 protected; HISTLOG = 50; SYSLOG = 200
Derived channels	Up to 2048 Arithmetic; Binary Manuals; Chronometers; Watt-hour integration; Constants; Thresholds (Setpoints); Programmable Delays; Lookup Tables; Time Set Points; Groups (Automation); Schedules; Duty Cycle/Average and Battery Reserve Estimation (BRES) channels; 32 Programmable Views; 32 Callouts; 8 PID; 4 Lead/Lag.
HMI Graphics (optional)	HMI Graphics (optional)

WHY CHOOSE MULTITEL?

Multitel has over four decades of expertise and a long-standing, proven track record in providing robust, accurate and versatile solutions for North American telecom, power utilities, railways and CATV operators that need real-time visibility of their critical sites.

Our company is synonymous with unmatched customer service, market responsiveness, on-time delivery and a proximity with clients that is second to none. Throughout each project, we work with our clients to identify their unique needs and challenges, and offer pragmatic solutions attuned to their realities and goals. Easy to do business with, Multitel delivers, time and time again.

With **Multitel**, customer satisfaction comes standard.

KEY MARKETS



TELECOMMUNICATIONS



POWER UTILITIES



RAILWAYS



CATV/BROADBAND

Acquiring the FUSION is more cost-effective than maintaining your legacy infrastructure.


DC Plant Monitoring

DC PLANT												
DC PLANT INFORMATION	ALARM		TERRA 1		ALARM		TERRA 2		ALARM		TERRA 3	
	ALARM	STATUS	ALARM	STATUS	ALARM	STATUS	ALARM	STATUS	ALARM	STATUS	ALARM	STATUS
TOTAL DC PLANT VOLTAGE	55.0 VDC	OFF	52.8 VDC	OFF	52.8 VDC	OFF	52.8 VDC	OFF	53.0 VDC	OFF	54.0 VDC	OFF
TOTAL DC PLANT CURRENT	1489 ADC	OFF	1782 ADC	OFF	2240 ADC	OFF	1489 ADC	OFF	1172 ADC	OFF	1172 ADC	OFF
TOTAL DC PLANT POWER	77 kW	OFF	95 kW	OFF	168 kW	OFF	78 kW	OFF	53 kW	OFF	53 kW	OFF
ROOM TEMPERATURE	20.1 °C	OFF										
DC SYSTEM INFORMATION			TERRA 1			TERRA 2			TERRA 3			
DC SYSTEM	4000 ADC		4000 ADC		4000 ADC		4000 ADC		4000 ADC		4000 ADC	
DC PLANT USAGE	37 %		30 %		54 %		30 %		20 %		20 %	
RECTIFIER MAKE & MODEL	C88F SF 48VW		C88F SF 48VW		SE Model-n		C88F SF 48VW		C88F SF 48VW		C88F SF 48VW	
TOTAL RECTIFIER CAPACITY	2000 ADC		8000 ADC		7040 ADC		2077 ADC		2200 ADC		2200 ADC	
TOTAL RECTIFIER USAGE	59 %		59 %		49 %		59 %		55 %		55 %	
NUMBER OF RECTIFIER INSTALLED	30		14		32		27		16		16	
BATTERY MAKE & MODEL	EADE G3-8P		EADE G3-8		EADE G3-8P & NETWORK		EADE G3-8P		EADE G3-8S		EADE G3-8S	
TOTAL BATTERY CAPACITY	11120 Ah		11120 Ah		19830 Ah		11120 Ah		3183 Ah		3183 Ah	
BATTERY RESERVE TIME	5.0 hrs		4.2 hrs		3.0 hrs		7.3 hrs		3.0 hrs		3.0 hrs	
NUMBER OF BYPASS MODULES	3		3		3		3		4		4	

HVAC Monitoring

CRV UNITS						
CRAC INFORMATION						
CRAC NAME	CRV 214.45	CRV 214.43	CRV 207.16	CRV 207.07	CRV 210.09	CRV 216.07
MAKE AND MODEL	LIEBERT CRV	LIEBERT CRV	LIEBERT CRV	LIEBERT CRV	LIEBERT CRV	LIEBERT CRV
UNIT STATUS	(0) OFF	(0) OFF	(1) ON	(1) ON	(1) ON	(1) ON
ENVIRONMENT INFORMATION						
RETURN AIR TEMP	79.0 °F	74.3 °F	75.7 °F	75.4 °F	75.7 °F	74.5 °F
AIR TEMP SET POINT	77.0 °F	72.0 °F	73.9 °F	75.9 °F	75.0 °F	70.0 °F
AIR TEMP DEAD BAND	2.0 °F	2.0 °F	2.0 °F	2.0 °F	2.0 °F	2.0 °F
RETURN AIR OVER TEMP THRESHOLD	90.0 °F	90.0 °F	104.0 °F	90.0 °F	90.0 °F	90.0 °F
RETURN HUMIDITY	23.5 %	26.5 %	25.0 %	26.0 %	23.5 %	25.0 %
HUMIDITY SETPOINT	25.0 %	25.0 %	20.0 %	20.0 %	25.0 %	25.0 %
HUMIDITY DEAD BAND	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %	5.0 %
HIGH HUMIDITY THRESHOLD	85.00 %	85.00 %	90.00 %	85.00 %	99.00 %	85.00 %
LOW HUMIDITY THRESHOLD	15.0 %	1.0 %	15.0 %	1.0 %	1.0 %	1.0 %
COOLING CAPACITY	0.0 %	0.0 %	100.0 %	0.0 %	66.0 %	100.0 %
CRAC STATUS						
RETURN AIR OVER TEMPERATURE	OFF	OFF	OFF	OFF	OFF	OFF
HIGH RETURN HUMIDITY	OFF	OFF	OFF	OFF	OFF	OFF
LOW RETURN HUMIDITY	OFF	OFF	OFF	OFF	OFF	OFF
COMP 1 HIGH HEAD PRESSURE	OFF	OFF	OFF	OFF	OFF	OFF
CLOGGED AIR FILTER	OFF	OFF	OFF	OFF	OFF	OFF

Generators Monitoring

GENERATOR UNIT	
	
START BATTERY DATA	
BATTERY VOLTAGE	26.90 VDC
LOW BATTERY VOLTAGE	OFF
HIGH BATTERY VOLTAGE	OFF
BATTERY CHARGER FAIL	OFF
GENERATOR INFORMATION	
MAKE	CUMMINS
MODEL	DGKAS
ALTERNATOR DATA	
PHASE A L-N VOLTAGE	0.0 Vdc
PHASE B L-N VOLTAGE	0.0 Vdc
PHASE C L-N VOLTAGE	0.0 Vdc
PHASE A CURRENT	0.0 amps
PHASE B CURRENT	0.0 amps
PHASE C CURRENT	0.0 amps
PHASE A L-L VOLTAGE	0.0 Vdc
PHASE B L-L VOLTAGE	0.0 Vdc
PHASE C L-L VOLTAGE	0.0 Vdc
AVERAGE L-L VOLTAGE	0.0 Vdc
FREQUENCY	0.00 Hz
PHASE A POWER	0.0 kW
PHASE B POWER	0.0 kW
PHASE C POWER	0.0 kW
TOTAL GENSET POWER	0.0 kW
TOTAL POWER FACTOR	1.000 PF
GENERATOR INFORMATION	
OIL PRESSURE	0.0 Psi
OIL TEMPERATURE	70.20 °F
COOLANT TEMPERATURE	35.90 °C
INTAKE MANIFOLD TEMPERATURE	87.80 °F
RUB. TEMPERATURE	86.20 °F
ENGINE RPM	0.0 RPM
GENERATOR STATUS & ALARMS	
LOW COOLANT LEVEL	OFF
OVERSPEED	OFF
LOW FUEL	OFF
LOW OIL PRESSURE	OFF
FRESH OIL PRESSURE	OFF
HIGH ENGINE TEMPERATURE	OFF
FRESH HIGH ENGINE TEMPERATURE	OFF
LOW COOLANT	OFF
FAIL TO START	OFF
NOT IN AUTO	OFF
GENSET RUNNING	OFF
GENSET SUPPLYING LOAD	OFF

Multitel

3710 Wilfrid Hamel Blvd.
Quebec (QC) G1P 2J2
Tel 418.847.2255
Toll Free 1.888.685.8483
info@multitel.com

multitel-inc

Take advantage of the power and performance of our **all-in-one remote telemetry units.**

Contact us today: **multitel.com**