

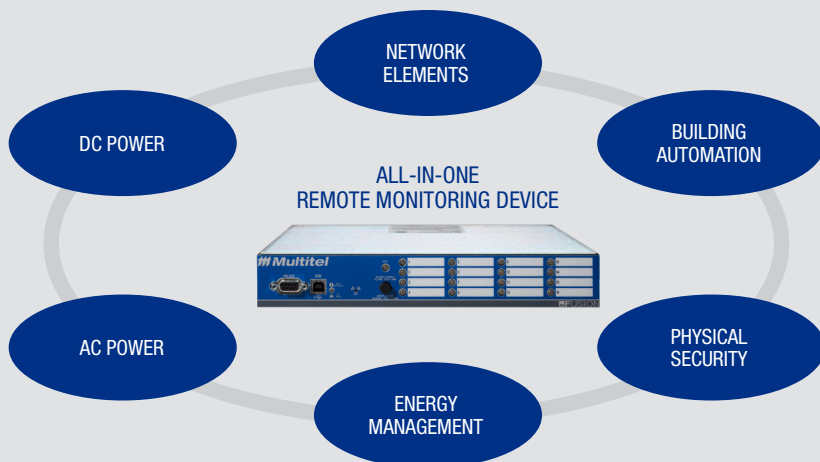


# FUSION

## 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)**.

## COST-EFFECTIVE

## EASY TO USE

**SECURE**

## SEAMLESS CONNECTIVITY

## SCALABLE

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

The diagram illustrates the Multitel Fusion 11220 system architecture, showing its central role in managing various industrial and facility components. The central unit, the Multitel Fusion 11220, is connected to several key components:

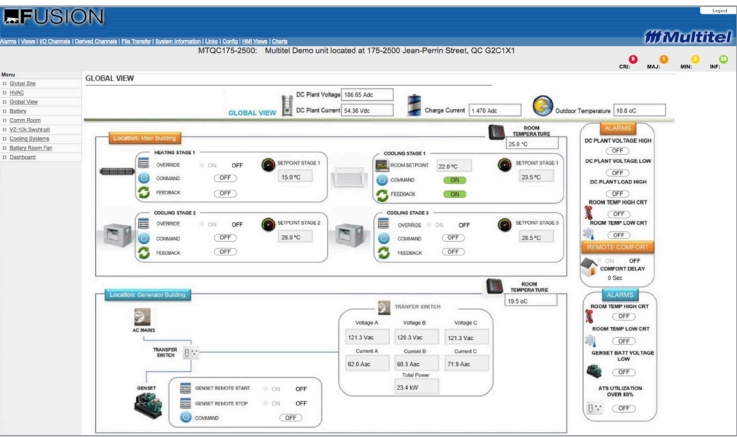
- Top Connections:**
  - Servers, IP Router, DSLAM:** Connected via PING (Ethernet).
  - METERED PDU's, UPS, DC PLANT CONTROLLER:** Connected via SNMP GET (Ethernet).
  - DDC, I/O, GENERATOR CONTROLLER, POWER QUALITY, ENERGY METER, BATTERY SENSOR, PROXY READERS:** Connected via MODBUS (RS-485).
  - SMART EXPANSION MODULES:** Connected via MLINK (RS485).
  - EXPANSION I/O BOARDS:** Connected via INTERNAL (SBUS).
- Left Connections:**
  - Legacy Serial Device:** Connected via Console/HUB.
  - Laptop:** Connected via RS-232.
  - Field Maintenance Staff:** Connected via CLI, Terminal, and PDA/Mobile.
  - NTP Server:** Connected via NTP.
  - SMTP (Email):** Connected via SMTP (Email).
  - RADIUS Server:** Connected via RADIUS.
  - SYSLOG Server:** Connected via SYSLOG.
- Right Connections:**
  - LAN/WAN:** Connected via Ethernet 100B/T.
  - SNMP Alarm/Event Management:** Connected via SNMP V1/v2c/v3.
  - Dashboard & Reports:** Connected via HTTP/HTTPS.
  - Terminal:** Connected via TELNET/SSH.
  - Network Operations (NOC) Staff:** Connected via the SNMP Alarm/Event Management interface.
  - Network Engineering or Facility Staff:** Connected via the Dashboard & Reports and Terminal interfaces.

The central unit also features a 56k MODEM (Optional) and a display showing various status indicators, including 1 AC FAIL, 2 DOOR OPEN, 3 LOW FUEL, and 4 HILO TEMP.

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

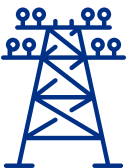
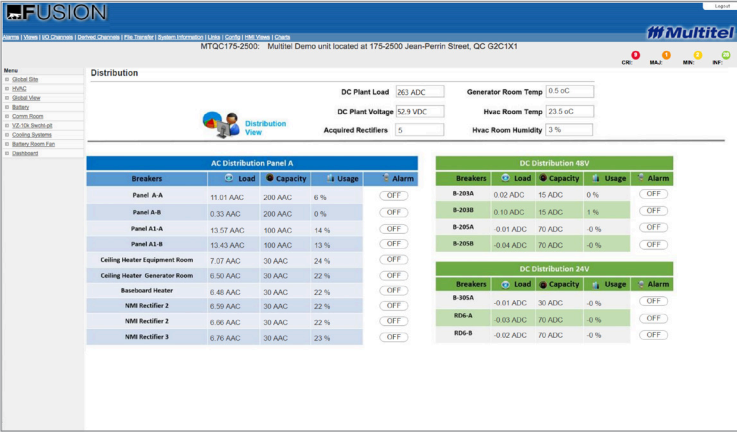
KEY MARKET SECTORS

Building Monitoring and Control System



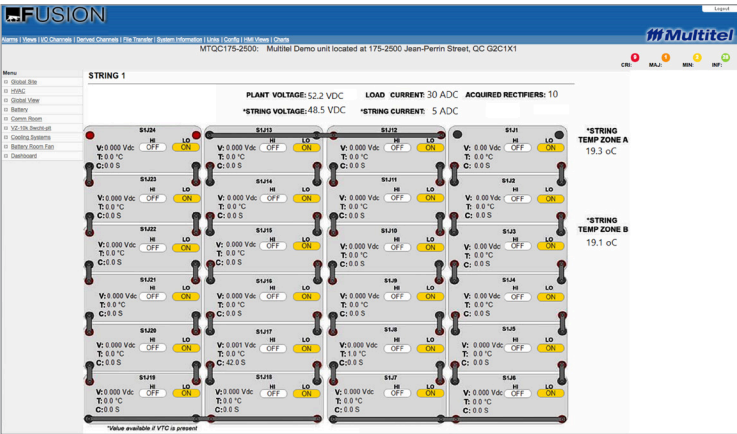
TELECOMMUNICATIONS

AC/DC Distribution Branch Circuit Monitoring



POWER UTILITIES

Battery Monitoring System



RAILWAYS



CATV/BROADBAND

## 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)	Up to 10 MI view files (depending on the graphic file size)

## 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.**

 **Multitel**

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

Contact us today:  
**multitel.com**