davicom
Remote Site Management Systems

Davicom Cortex Series

Your Remote Site Management Solution for Alarms, Monitoring & Control

Davicom's new generation of intelligent site management systems is designed to meet the most stringent requirements of the broadcast and wireless telecommunications industries. These best-in-class, stand-alone monitoring and control units interface easily with virtually any type of remote site equipment and sensors, thereby ensuring maximum flexibility and expandability.

Let the CORTEX be Your Brain at the Site

Decide & Control

Cortex units can make decisions based on Virtual Logic Gates, automating the control of equipment at the remote site. Based on the readings from the sensors it is connected to, the Cortex series units can control a broad range of equipment in multiple ways.

Sense Site Status & Environment

Connect multiple types of sensors to add environmental awareness to your Cortex. Low-cost and widely available MODBUS sensors can also be used.

360 ˚Awareness

Manage your site through a standard dial-up modem connection, by DTMF/voice response or through a network connection. Get situational awareness on any device with the web based interface or let the Cortex tell you what's potentially wrong at your site.

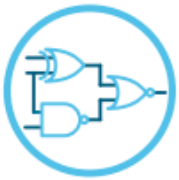
Listen & Recall

Cortex units can listen to your site audio and warn you of potential silence, or even relay live audio back to you via telephone or IP streaming. It is also capable of keeping track of all conditions and events that happen at your site.

Your Manager at the Site. Here's Why.

Design Automation Without a Single Line of Code!

Cortex systems provide automation with decision-making features and commands that go well beyond conventional telemetry systems. Units can for example detect an RF failure; place the standby transmitter on-air to restore the signal, and alert on-call personnel. Engineering staff can then diagnose the problem from the event history log and, using remote measurements, decide on the appropriate course of action.



Virtual Logic Gates

Math Functions

Schedulers

Virtual Relays

Activity Timers

Up/Down Counters

Connect Any Type of Analog or Status Sensor

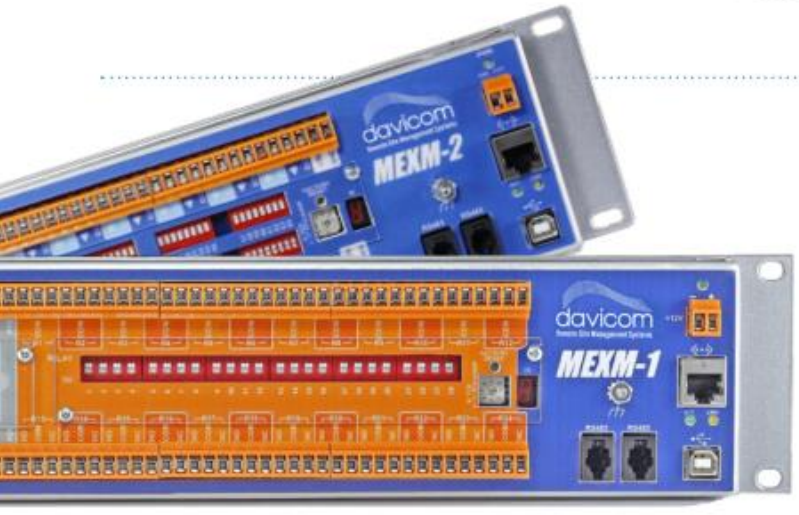
Directly connect analog sensors, status sensors and audio feeds. No extra boards to buy!

Any I/O can be assigned to an activity monitor that checks for too much, or too little activity on the input. Daily cumulative runtimes are stored and logged.

Use any analog input to turn your Cortex into an audio silence detector.

Control External Equipment

With its relay outputs, the Cortex can command and control other equipment. From remotely switching to a backup transmitter to turning on the generator when a power outage occurs, the Cortex can take smart decisions to keep your site transmitting.



Need More I/O?

No worries, MEXM expansion panels or Modbus slaves will let you add up to:

256	256	256
Analogs Inputs	Status Inputs	Relay Outputs

320 CORTEX

Pause & Local buttons

Safeguard on-site personnel by blocking automation & remote access.

Audio Listening Jack

Access site audio from the front panel jack.

Health Indicator LEDs

Instantly assess site & unit status with the front panel LEDs.

Local Connection

USB connector for local connection to laptop computer.

Audio Input/Output

Connect site audio to the line-in or feed the audio to an external mic input.

I/O Connectors

Connect all I/O's to the compact DB-25 connectors.

Power Failure Check

Monitor AC power at your site with the included wall-wart.

On-board USB hub

Connect up to 2 USB devices (Memory stick or other Davicom products).

Power input

12 VDC for easy battery backup.

Ethernet Port

Connect to the outside world and/or to other onsite equipment.

Phone Line

Connect to the outside world via dial-up modem.

360 CORTEX

Pause & Local buttons

Safeguard on-site personnel by blocking automation & remote access.

OLED Display

Immediate access to alarms, I/O states & basic configurations.

Audio Listening Jack

Access site audio from the front panel jack.

Menu Buttons

Convenient buttons let you navigate through the different menus.

Local Connection

USB connector for local connection to laptop computer.

Health Indicator LEDs

Instantly assess site & unit status with the front panel LEDs.

Dual Power Supply

Add redundancy by connecting two 10 to 30 VDC power supplies.

I/O Connectors

Connect all I/O's to the compact DB-50 connectors.

On-board USB hub

Connect 4 USB devices (keyboard, mouse, memory stick or other Davicom products).

Power Failure Check

Monitor AC power at your site with the included wall-wart.

Ethernet Switch

Connect to the outside world and/or to other onsite equipment.

Audio Input/Output

Connect site audio to the line or mic input and feed the audio to an external mic input using line-out.

Video Output

Connect a flat screen monitor and access the unit through the internal GUI without an on-site computer.

Serial Connection

Connect to legacy devices or to the outside world through this serial port.

Phone Line

Connect to the outside world via dial-up modem.

Simple Network Management Protocol (SNMP)

SNMP Agent

Cortex units have a built-in SNMP agent to allow monitoring and control from a central SNMP manager. When activated, this agent allows remote SNMP management systems to perform GETs, SETs and to receive traps from Davicom units.

This feature has the added benefit of converting non-SNMP legacy site devices into SNMP-capable equipment through the Cortex's GPIO and SNMP agent.

Up to...

1024	1024	1024
GETs	SETs	TRAPs

SNMP Manager

The Cortex built-in SNMP Manager* allows it to take readings, set controls and receive alarms from SNMP enabled devices. This monitoring and control is achieved over a simple TCP/IP connection between devices, thus greatly facilitating interface wiring.

Available SNMP Manager Packages

Included*	Plus	Pro	Ultra
128 GETs	256 GETs	512 GETs	1024 GETs
128 SETs	256 SETs	512 SETs	1024 SETs
128 TRAPs	256 TRAPs	512 TRAPs	1024 TRAPs

Build a Cortex Smart Network

Use the Cortex's SNMP agents and managers to build a complete network of interconnected, interacting and redundant site managers.

*Basic Cortex 320 does not have an SNMP manager.

Use network PINGs to debug your network

Ping different network branches or even the outside Internet to map network connectivity and faults.

Or use this feature as a failsafe to reset flaky network elements!

Have your Davicom automatically reset network components from the remote end of your network link.

Complete Web-Based Interface

Clean • Modern • Easy To Use

The Cortex series' web-based workspaces are completely customizable by the user. In addition, each user can have different workspaces on multiple devices (smartphone, tablet or PC). These workspaces have the advantage of being stored directly on the Cortex unit itself, thereby ensuring a uniform look when being accessed by different users. For low-bandwidth communications, workspaces may also be located on your personal computer using our DavLink software.

Save Two Firmware Versions in the Same Unit

Count on stress-free firmware upgrades thanks to the Cortex's dual firmware memory spaces that ensure fail-over and roll-back operation. Upgrades become virtually unbreakable, even if you pull the plug during an upgrade!

Top-quality design for Electromagnetic Compatibility

Davicom units have been developed and tested to operate in high-level electric fields and to resist electrostatic discharges. Exactly the type of environment you would expect to find near high power transmitters on a mountaintop with a metal tower!

Smartphone app for Easy Control and Notifications

The Dav2You APP brings you the exact information you need, when you need it and where you need it. Whether on the road, at the office or at the site, you can connect to any Cortex unit or receive notifications and get critical site information within seconds.

GET IT ON Google Play

Download on the App Store

All Davicom units have the following features

- USB device port on front panel
- Secure IP over Ethernet or Internet
- Automatic action on conditions or events
- Voice response/DTMF over phone
- FAX transmission capability
- Automatic detection of PSTN dial-tone
- Compatible with DavNet NOC software
- Integrated Web Server
- 100 ms sampling interval on inputs
- Individual Relay pulsing to 0.1s resolution
- 16 alarm-call lists, with 10 recipients per list
- Configurable delays on individual alarms
- Hysteresis on metering inputs
- 4 simultaneous users
- Automatic commands between remote Davicom units
- Alarms via E-Mail with HTML and XML file attachments
- Alarms via SMS
- Alarm transmission to multiple Pagers
- Vocal descriptions from 400-word vocabulary
- Sync to NTP & ACTS servers
- Battery Discharge Test
- Internal Battery Backed RTC
- PSTN Caller ID placed in log
- RF immunity to 10V/m
- Electro Static Discharge immunity to 12kV
- User configurable screens
- Multiple workspaces
- Operation from 12 VDC supply
- Automatic Day-Night settings from Latitude & Longitude
- Modbus I/O expansion capability in TCP or RTU modes
- Logging to: System log (1024 events), Custom log (1024 events), EAS log (1024 events), Data logs (millions of events at 1 Hz rate)
- Automatic VSWR calculation
- Linearization of sensor inputs
- No moving parts (Cooling Fan nor HDD)

Specifications	320 CORTEX	360 CORTEX
Metering (Analog) Inputs	12* (single ended/unipolar)	8 (differential/bipolar)
Status (Digital) Inputs	4	16
Audio Inputs for remote listening	1	2
Outputs (Command Relays)	6	8
Network Monitoring Pings	32	64
Virtual Logic Gates	128	128
Event schedulers	64	128
Math Functions	16	32
Unit to Unit Commands	128	128
Counters	16	32
SNMP Agent	Yes	Yes
SNMP Manager	No (options available)	Yes
USB Host Ports (hub)	2	4
Ethernet ports (switch)	1	4
Power Supply	12VDC, single	10-30VDC, dual redundant inputs – 48VDC option
Front Panel Display	7 Status LEDS	Scrollable OLED display
Digital Video Output	No	Yes
Operating Temperature	0° to -70°C (-40° to +70°C optional)	-40° to +70°C
Dimensions	15.5" x 11" x 1.75"	19" x 12" x 1.75"
Rack Space	1 RU, half width	1 RU
Weight	2.42 lbs	4 lbs

*Can be used as status inputs

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Remote Site Management Systems

Davicom, a division of Comlab Inc.
2272, Leon-Harmel
Quebec QC Canada G1N 4L2
Tel: +1.418.682.3380
Fax: +1.418.682.8996

davicom.com

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320 CORTEX

Davicom's New Cortex 320 Manages Remote Sites on a Budget

Davicom's new Cortex 320 allows the cost-effective management of remote sites and incorporates over 30 years of experience and knowledge in the remote site management industry. The resulting product is a versatile and intelligent unit that is more than reasonably priced.

Whether it be the versatile inputs that can be configured for either Metering or Status signals, the relays that can be set for Form A, B or C operation, the SNMP agent, the small size, the secure web-based access or the full electromagnetic immunity, every aspect of the Cortex 320 has been optimized to maximize value for small budgets.

Specification	Number	Description
Versatile Inputs	12	Single-ended; Resolution: 12 bits; Selectable ranges: 0- 5 or 0-60VDC; Impedance - 1 MΩ; Audio Rectifier: jumper selectable; Useable as Status Inputs also with selectable internal pull-up resistor;
Status (Digital) Inputs	4	Independent returns on each input; Selectable internal or external ground Opto-isolated; Impedance > 22 kΩ; Detection Levels: -12 to 0.8 VDC (low), +2.4 to +12 VDC (high). Activity monitoring & cumulative run-time on all inputs
Audio Input for remote listening	1	Back-panel audio connector can be configured as either an input (for remote listening via dial-up & IP streaming), or as an output for audio alarm message transmission. Streaming sampling rate: 8kS/s to 48kS/s; Software selectable;
Outputs (Commands)	6	3 Form C Relays with C, NC and NO contacts 3 Form A/B Relays with individually-selectable NO/NC dry contacts

See **davicom.com** or call us at **1-877-282-3380** for more details.

Auxiliary DC Outputs	2	5 VDC @ 500mA max, 12VDC @ 500mA max
Local Access Port	1	USB type B connector located on front panel.
Serial Ports for On-Site Ancillary Equipment	2 + 2	2 with USB-to-Serial dongles and 2 with an external USB hub (not included).
Internal Modem	1	RJ-11 jack located on rear panel; Voice/Fax/Data; 56 kbps maximum; Fax up to 14400 bps; DTMF interface.
USB Hub	2	Built-in, 2-port.
Ethernet ports	1	100 base T
Real Time Clock (RTC)	Yes	With 10 year backup battery.
Virtual Logic Gates	128	Logic decision nodes for automatic actions and controls.
Virtual Relays	128	Virtual triggers for automatic actions and controls.
Event scheduler & masker	64	Timers to trigger events or mask inputs at specific times. On days, dates, weeks, months or years and combinations thereof.
Network Monitoring	32	Network Pings to on-site or off-site IP addresses.
Up/Down Counters	16	Up/Down Counters with High-Low limits & Reset, controllable from any I/O
Activity Monitoring	16	Activity Monitors that can keep track of the activity on any I/O
Math Functions	16	Math Functions can add, subtract, divide, multiply, find the square root or perform a logarithm function of sensor readings.
SNMP Agent	Yes	V1, V2c, V3. Full access to control & monitor all functions of the Cortex 320 unit
SNMP Manager*	*Cost Option	SNMP Manager is only available with the SNMP MGR package. This cost option gives 256 GET, 256 SET, 256 TRAP/INFORM.
SmartPhone App		Android & iOS
Backhaul modes		Dial-up, Ethernet, Cellular-data, Satellite, 2-way radio link.
Alarm transmission modes		Voice, SMS, E-Mail (with TXT & XML attachments), SNMP TRAP, Smartphone Notification, Pager, FAX, DavNet (Dial-up & IP).
Voice response languages		English, Spanish, French. Others available on request.
Protocols supported		HTTP, HTTPS, SNMP, FTP, DHCP, SMTP, DNS, NTP, Modbus
Electric Field Immunity		Tested to 10 V/m.
Electrostatic Discharge (ESD) Immunity		Tested to 12 kV.
Operating voltage/current		12VDC. Typically 200mA (275mA with all relays energized) . 24VDC option available.
Fuse		250 V, 3 A.
Operating Temperature Range		0-70°C (32°F to +158°F) (optional:-40°C to +80°C (-40°F to +176°F) range)

MECHANICAL SPECIFICATIONS :

Dimensions	1 RU, half width 9.5 x 1.75 x 12 in (W x H x D). 24.1 x 4.4 x 30.5 cm
Weight	2.75 lbs (1.25 kg) dry, 4 lbs (1.8 kg) shipping

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360 CORTEX

Davicom introduces its most powerful Remote Site Management System ever!

Based on the latest hardware processors running an embedded Linux Operating System, the Cortex 360 incorporates 30 years of experience and knowledge in the remote site management industry. The resulting product is a versatile and intelligent unit that is very reasonably priced.

Whether it be the redundant power supply inputs, the extensive networking/SNMP capabilities, the secure web-based access, the differential metering inputs with high common-mode voltages or the full electromagnetic immunity, **everything in the Cortex 360 says Professional Grade product!**

Specification	Number	Description
Metering (Analog) Inputs	8	Resolution: 12 bits; Bipolar/Differential; Selectable ranges: 0.5, 2.5, 5, 10, 20, 40 & 80 VDC; 4-20mA input mode jumper selectable; Impedance - 1 MΩ; Audio Rectifier: software selectable.
Status (Digital) Inputs	16	Independent grounds on each input; Opto-isolated; Impedance > 22 kΩ; Detection Levels: -12 to 0.8 VDC (low), +2.4 to +12 VDC (high). Activity monitoring & cumulative run-time on all inputs
Audio Inputs for remote listening	2	Via dial-up & IP streaming. Streaming sampling rate: 8kS/s to 48kS/s software selectable; Impedance: Line-in-29kΩ, Mic-in-2.9kΩ
Outputs (Commands)	8	Selectable NO/NC dry contact relays (70 VAC @ 0.4A, 30 VDC @ 2A) or open collector (100 mA)

Specification	Number	Description
Local Access Port	1	USB type B connector located on front panel.
Serial Ports for On-Site Ancillary Equipment	1 + 8	1200 to 115200 bps, DB9 male connector located on rear panel. Extra 8 ports through 4-port USB hub + 4-port external hub.
Internal Modem	1	RJ-11 jack located on rear panel; Voice/Fax/Data; 56 kbps maximum; Fax up to 14400 bps; DTMF interface.
External Modems through USB Hub	4	USB modems required. Must support Linux CDC drivers.
USB Hub	4	Built-in, 4-port.
External USB Storage through USB Hub	4	Up to 4 external USB memory devices. FAT32 formatted.
Ethernet ports	4	Built-in switch, 4-port, 100 base T
Real Time Clock (RTC)		With 10 year backup battery. Optional sync to 50/60 Hz utility power. Optional TCXO. Optional 1 MHz or 1 PPS GPS clock sync.
Network Monitoring	64	Network Pings to on-site or off-site IP addresses.
Virtual Logic Gates	128	Logic decision points for automatic actions and controls.
Event scheduler & masker	128	Timers to trigger events or mask inputs at specific times. On days, dates, weeks, months or years and combinations thereof.
SNMP Agent		V1, V2c, V3. Full access to control & monitor all functions of the Cortex 360 unit
SNMP Manager		128 GET, 128 SET, 128 TRAP/INFORM. Optionally expandable to 1024 GET, 1024 SET, 1024 TRAP/INFORM.
SmartPhone App		Android & iOS
Backhaul modes		Dial-up, Ethernet, Cellular-data, Satellite, 2-way radio link.
Alarm transmission modes		Voice, SMS, E-Mail (with TXT & XML attachments), SNMP TRAP, Smartphone Notification, Pager, FAX, DavNet (Dial-up & IP).
Voice response languages		English, Spanish, French. Others available on request.
Protocols supported		HTTP, HTTPS, SNMP, FTP, DHCP, SMTP, DNS, NTP, ModBus
Electric Field Immunity		Tested to 10 V/m.
Electrostatic Discharge (ESD) Immunity		Tested to 12 kV.
Operating voltage/current		10 to 30 VDC. Typically 0.3 A @12VDC. Dual PSU inputs.
Auxiliary DC Outputs	2	5 VDC @ 500mA max, 12VDC @ 500mA max
Fuse		250 V, 3 A.
Operating Temperature Range		-40°C to +80°C, (-40°F to +176°F)
MECHANICAL SPECIFICATIONS :		
Dimensions	1 RU 19 x 1.75 x 12 in (W x H x D) 48.3 x 4.4 x 30.5 cm	
Weight	4 lbs (1.8 kg) dry, 5 lbs (2.3 kg) shipping	

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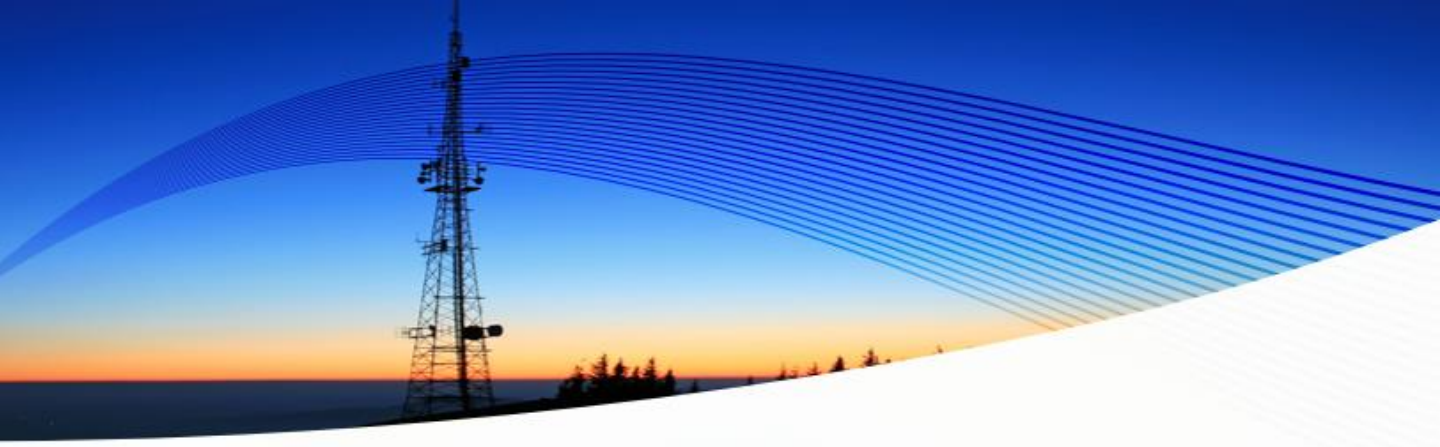
Complete Control and Confidence

Davicom DV Series –
Monitoring, Alarm and Control for your remote sites

Davicom's line of intelligent site monitoring systems is designed to meet the requirements of the broadcasting and wireless telecommunications industries. These best-in-class, stand-alone monitoring and control units interface easily with virtually any type of remote site equipment and sensors, which ensures maximum flexibility and expandability. Immediate access to real-time site information can be just a mouse click away

Reliable Technology Leading the Field Since 1994

Davicom systems provide automation with decision-making features and commands that go well beyond conventional telemetry systems. The Davicom units can for example detect an RF failure; place the standby transmitter on-air to restore the signal, and alert on-call personnel. Engineering staff can then diagnose the problem from the event history log and, using remote measurements, decide on the appropriate course of action.



Ultimate Connectivity for Maximum Performance

Multilevel alarms can be sent by the Davicom units to the Network Operations Centre (NOC) and other resources by e-mail, phone (voice or SMS), pager, SNMP traps, fax, modem, or to the DavNet multi-site alarm management software. Multiple alarm-call lists allow the Davicom to contact different groups depending on the event, or the day and time. Individual signal and status conditions can be filtered using time delays and hysteresis to prevent annoyance alarms.

Davicom units can be interrogated via PC using the DavLink software, with a Web browser or SNMP manager, or by telephone to check signals and status, monitor live audio feeds and execute commands. Android®, iPhone® and other smart phones and devices can also be used to monitor and control a site over the mobile Internet and from WiFi hotspots. The Davicom's reach-through serial ports can be used to access and control other on-site ancillary equipment. The Davicom units can even ping site equipment through its local IP port and monitor for dial tone on the telephone line.

Save Time & Money

For several years, leading broadcasters and first responder organizations around the world have been relying on efficient Davicom technology to remotely monitor and control their site equipment and reduce operating costs.

Davicom system features and benefits include:

- Easy installation, set-up, and operation.
- Reliability proven in the field since 1994.
- Single-location management of all sites.
- Automated operations and manual control to minimize operational downtime.
- Fewer trips to remote sites.
- Stand-alone units that do not require a computer at the site.
- Direct monitoring of site audio via telephone or IP streaming.
- Real-time access to site information from anywhere in the world.
- No moving parts such as fans or hard-disk drives.

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DV-Micro is Adapted for Tight-Budget Requirements

DV-Mini Unit is Ideal for Single-Transmitter Sites

DV-208 and DV-216 are Designed for Larger Sites

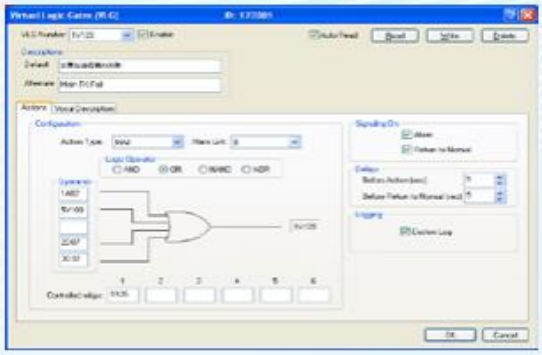
More I/O's through Easy expansion

	INPUTS		OUTPUTS	CONNECTIONS				REACH THROUGH	AUDIO MONITORING
	Metering	Status	Relay	USB	Serial	IP	Phone		Phone/IP
DV-Micro	8	8	8	1	0	1	1	0 (+8*)	1*
DV-Mini	8	16	8	1	1	2	1	1 (+8*)	2
DV-208	8	16	16	1	2	2	1	4 (+8*)	4
DV-216	16	32	32	1	2	2	1	8 (+8*)	8
MEXM-1	24	24	24	1	2	1	—	—	—
MEXM-2	—	64	—	1	2	1	—	—	—

*Through USB-serial adapters *Phone only

Bilingual Voice & Screen Capability

Each user can select the language for DavLink displays (ASCII and Unicode character sets), as well as the voice response system. Custom vocabulary can be factory-recorded into Davicom units, allowing them to "speak" information using different descriptive phrases.

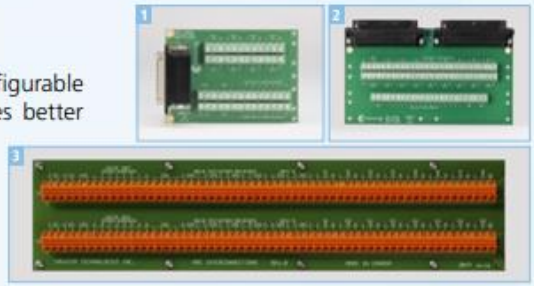


Intuitive Software, No Macro or Script Writing

DavLink software uses Boolean logic (AND, OR, NAND, NOR) and mathematical functions (+ , - , X , ÷, LOG10) to allow non-programmers to create complex operations with ease. Each Davicom unit has 128 virtual logic gates and 16 mathematical functions to program multiple conditional actions and complex logic functions (control relays, set qualifiers, view flags, or other events). In addition, Davicom units have qualifier and inverter functions on all inputs. A built-in configuration wizard guides users through a step-by-step set-up procedure.

Complete Package, Relays Included

All output relays are included and are individually software configurable for latch, follow and variable-length pulse modes. This ensures better compatibility with equipment control requirements. Package includes screw-terminal break-out panels, cables and a 12VDC power supply. DavLink software and firmware upgrades are included, upgrades are free and there is NO ANNUAL MAINTENANCE FEE.



1. DV-Micro I/O Panel 2. DV-Mini I/O Panel 3. DV-208/DV-216 I/O Panel

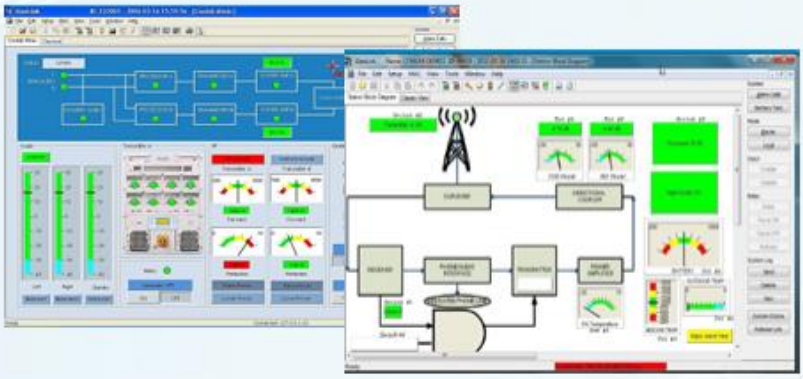
Time & Event-Based Conditions

Date/time events & windows can be set up with the 128 timers available in each Davicom unit. For example, AM antenna pattern changes with specific time windows for each month can be configured. Additionally, 16 alarm call lists can be constructed with specific time windows or events (alert different persons during day/night work shifts, contact the fire department directly upon fire alarm, etc.).

Multi-User

Up to 4 different users out of a possibility of 16 can connect simultaneously to Davicom units. Users can have access levels ranging from simple view-only to full administrative privileges. In emergency situations, Supervisor-level users can take control away from Operators who are already connected.

Customizable Software



DavLink's graphics editor allows the creation of workspaces that reflect the exact setup of equipment at each remote site. Users can have their own customized, password-protected workspace and create multiple view panels with diagrams, and even pictures. Users can also focus-in on desired information thanks to system and user-defined custom logs.

Future-Proof

- Powerful processor and lots of RAM and Flash memory
- Easily expandable, high-level program code allows for future enhancements
- Web-browser access
- Smart-phone access
- Full SNMP support

Secure & Reliable

- 128-bit encrypted IP communications
- Dual-modem ready (primary link over landline, and backup using GSM for example)
- Firmware & user configuration remain intact during power failure
- Highly accurate TCXO-based real-time clock
- No moving parts.

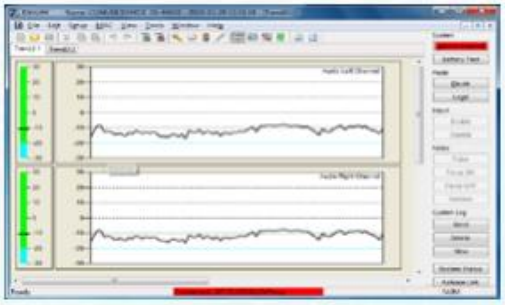
Modbus* I/O expansion

Low-cost option for adding up to 128 metering inputs, 256 status inputs and 72 relay outputs, even to a DV-Micro! All Davicom units accommodate both RTU and TCP type ModBus devices from manufacturers such as ADAM® and Koyo®. Once connected and configured, the Modbus units simply appear as extra I/O points in the Davicom's operating structure. These I/O's can therefore be used within the Davicom's powerful Virtual Logic Gate structure to automatically take action at a site or to send alarms if required.

* Modbus is a serial communications protocol published by Modicon in 1979 for use with its programmable logic controllers (PLCs). It has become a de facto standard protocol for industrial communications, and is now the most commonly available means of connecting industrial electronic devices.

Data logging and DavLink data trending

All Davicom units have the capability of taking input readings at a 1-Hz rate and storing them to an external USB device such as a Flash memory stick or hard disk drive. Up to 32 inputs can be simultaneously sampled and stored in this manner. Readings can then be browsed and/or transferred at a later date to facilitate troubleshooting of intermittent site problems. Note that a data connection with adequate bandwidth must be available to download the complete site data log. Alternatively, small snippets of data for particular dates and times can be transferred over a modem connection, or the USB memory device could be physically brought back from the site following a normal site visit.



The DavLink site communications application can be used to view site readings in graphical form when connected live to a site. This allows easy visualization of site trends and problems.

Simple Network Management Protocol (SNMP)

All Davicom units, except the DV-Micro, have a built-in SNMP agent to allow monitoring and control from a central SNMP manager. When activated, this agent allows remote SNMP management systems to perform GETs, SETs and to receive traps from Davicom units.

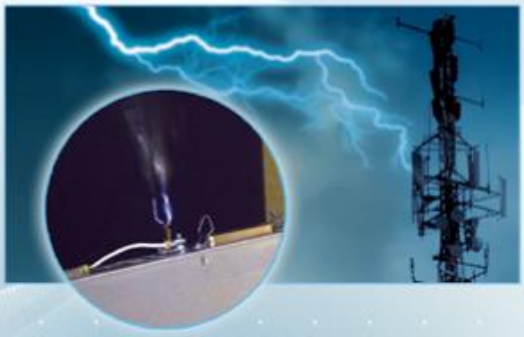
In addition, all Davicom units, except the DV-Micro have a built-in SNMP Manager that allows them to take readings, set controls and receive alarms from SNMP enabled devices such as transmitters. This monitoring and control is achieved over a simple RJ-45 TCP/IP connection between the Davicom and the device, thus greatly facilitating interface wiring. This I/O functionality is fully integrated into the Davicom's powerful Virtual Logic Gate structure to take full advantage of all of the Davicom features.

Network Management Software

DavNet is an optional Network Operations Center management software that collects alarms and data from large networks of Davicom units. DavNet can redirect alarms to external printers, e-mail, SMS text messages and SNMP traps. DavNet also includes a built-in web server to give external users access to NOC data and to Davicom units.

Electromagnetic Compatibility

Davicom units have been developed and tested to operate in high-level electric fields of up to 10V/m and to resist electrostatic discharges of up to 12kV. Exactly the type of environment you would expect to find near high power transmitters on a mountaintop with a metal tower!



Optional Sensors

Davicom can supply various external sensors that allow measurement of RF power, environmental, AC power, security and access control.

Bidirectional RF Power Sensor
Up to 1kW
100-500 MHz: BPS1050
500-950 MHz: BPS5095

RF POWER MEASUREMENT

Indoor/Outdoor IP Cameras
Indoor: IPCAM-I
Outdoor: IPCAM-O

SECURITY

Single Phase AC Voltage Sensor
0-5V Output: SACVS-1

Single Phase AC Current Sensor 10A
0-5V Output: SACCS-1

AC POWER MEASUREMENT

Temperature Sensors
-40°C to +85°C / -40°F to +185°F
Indoor: TS4085-I
Outdoor: TS4085-O

Lightning 0-40 KM
Strike Counting: DVLC-1
Range Detection: DVLD-1

ENVIRONMENTAL

2V, 12V, 48V : BMS
Temperature, Voltage,
Internal Resistance

BATTERY MONITORING

GENEREX

Tested & Certified

Davicom units are FCC, Industry Canada and CE certified. They are also RoHS/WEEE compliant. The management system governing the manufacture of this product is ISO9001:2008 certified.

FC CE RoHS COMPLIANT 2002/95/EC

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All Davicom units have the following features

- 128 Internal event Timers
- USB device port on front panel
- USB host port on back panel
- Secure IP over Ethernet or Internet
- Automatic action on conditions or events
- Voice response/DTMF over phone
- Bilingual voice
- Bilingual screens
- Can accommodate up to 6 Modems (1 internal)
- FAX transmission capability
- SMS transmission capability
- Automatic detection of PSTN dial-tone
- Pager transmission capability
- Compatible with DavNet NOC software
- Integrated Web Server
- 100 ms sampling interval on inputs
- Individual Relay pulsing to 0.1s resolution
- 16 alarm-call lists, with 10 recipients per list
- 16 Math Functions
- Configurable delays on individual alarms
- Hysteresis on metering inputs
- Local ping of 32 network devices
- 4 simultaneous users
- Automatic commands between remote Davicom units
- Alarms via E-Mail with HTML and XML file attachments
- Alarms via SMS
- Transmission to multiple Pagers
- Vocal descriptions from 400-word vocabulary
- Sync to NTP & ACTS servers
- Battery Discharge Test
- Internal Battery Backed RAM
- PSTN Caller ID placed in log
- RF immunity to 10V/m
- Electro Static Discharge immunity to 12kV
- User configurable screens
- Multiple workspaces
- Operation from 12 VDC supply
- Automatic Day-Night settings from Latitude & Longitude
- Modbus I/O expansion capability in TCP or RTU modes
- Logging to: System log (1024 events), Custom log (1024 events), EAS log (1024 events), Data logs (millions of events at 1 Hz rate)
- Automatic VSWR calculation
- Linearization of sensor inputs
- Activity Timer on Status Inputs
- No moving parts (Cooling Fan nor HDD)

Choose the Davicom unit that best fits your needs:

Feature	DV-Micro	DV-Mini	DV-208	DV-216
Expandability	Modbus	Modbus, SNMP	Modbus, SNMP & DV-216	Modbus, SNMP
Metering Inputs	8	8	8	16
Status Inputs	8	16	16	32
Internal SPDT 60W Relays	8	8	16	32
Range of metering inputs	0-5 VDC	±2.5, ±10, ±20V	±2.5, ±10, ±20V	±2.5, ±10, ±20V
4-20mA mode on metering inputs	NO	YES	YES	YES
Audio detection on metering inputs	NO	YES	High precision True-RMS option	High precision True-RMS option
AUX. Serial Ports (for tunneling to other devices)	0*	1*	4*	8*
RS-232 port on front panel	NO	YES	YES	YES
Ethernet ports	1	2	2	2
SNMP agent built-in	NO	V1, V2C, V3	V1, V2C, V3	V1, V2C, V3
SNMP Manager built-in	NO	GET, SET, TRAP, INFORM	GET, SET, TRAP, INFORM	GET, SET, TRAP, INFORM
iOS App	NO	YES	YES	YES
Android App	NO	YES	YES	YES
Real Time Clock (RTC)	STD stability	TCXO, Hi Stab	TCXO, Hi Stab	TCXO, Hi Stab
Audio port monitoring over dial-up	1	2	4	8
Audio port monitoring over IP streaming	0	2	4	8
Front-panel buttons	Local	Pause/Local	Pause/Local	Pause/Local
Operating temperature range	-40 to 70°C (-40 to 158°F)	-40 to 70°C (-40 to 158°F)	-40 to 70°C (-40 to 158°F)	-40 to 70°C (-40 to 158°F)
Rack space	1 RU, half width	1 RU	2 RU	2 RU
Dimensions	(W x H x D) 8 1/2 X 1 ¾ X 12 in	(W x H x D) 19 X 1 ¾ X 12 in	(W x H x D) 19 X 3 ½ X 12 in	(W x H x D) 19 X 3 ½ X 12 in
Weight (unit only)	4 lbs (1.8 kg)	6 lbs (2.7 kg)	7 lbs (3.2 kg)	8 lbs (3.6 kg)

* Up to 8 optional USB to serial adapters can be added for tunneling to other devices.

Comlab reserves the right to change the design and specifications without notice. Not all features presented here are available on all types of units. For more information on the Davicom line of products, or to find a distributor near you, visit www.davicom.com.

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Davicom, a division of Comlab Inc.
2300, Leon-Harmel, suite 220
Quebec, QC, Canada, G1N 4L2
Tel: +1.418.682.3380 Fax: +1.418.682.8996

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