Oil & Gas Projects Connect Simply with LAVA

LAVA I/O cards & serial device servers for

Mission Critical Data Acquisition / Remote Monitoring Projects

In process control and SCADA environments, such as the oil and gas industry, informed and timely decisions are crucial. When critical and costly operations are affected by even small things like a slight change in the weather, accurate data in real time must be 100% assured. Here's where LAVA add-in cards and serial device servers can play a major role in safeguarding serial data transmission for such applications as:

- *Pump and valve control*
- *Process control and instrumentation; and*
- *Managing PLCs, sensors, and flow meters.*

With LAVA device servers and add-in serial cards, devices and equipment that use serial communications can be networked over IP, LAN, or WAN.

Achieve greater operational or cost efficiencies with LAVA when you:

- *Reduce cabling by using a shared network instead of point-to-point connections.*
- *Bring your equipment up-to-date on today's networking standards without uprooting any part of your installed infrastructure.*
- *Remotely monitor data in real time.*

"We use the LAVA DSerial-PCI as part of the control and monitoring portion of a Fixed Automated Anti-Icing Spray Technology system that automatically applies liquid anti-icing chemical to the roadway in response to icing, frost, and freezing precipitation weather events. The LAVA card is installed in a server that dials the on-site controller to download data every 15 minutes. The other port is connected to a second modem that allows e-mail and paging notifications to be sent when key events occur."

David Vander Wal, P.Eng
Mark F Pinet and Associates, ON

"We recently purchased some Davis Weather Systems to disperse throughout various locations in the field. And since they are equipped with serial ports, LAVA Ether-Serial Links allow us to monitor and sample climate conditions remotely over any point in our network."

Eric Raymond
Gulfstream Natural Gas, FL

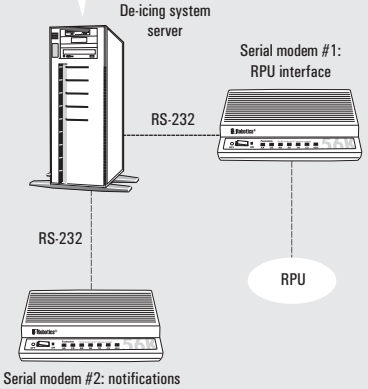
LAVA™
Connect Simply

+416-647-5942
2 Vulcan Street, Toronto, Canada M9W 1L2
sales@lavalink.com www.lavalink.com

LAVA DSerial-PCI
for automated de-icing system

One port of the LAVA DSerial-PCI polls data from the pumps, valves, metering devices, connections, controls, sensors, and storage tank of the remote pump site (RPU) into the server, and the second port sends e-mail and paging notifications. The server dials out to RPUs to retrieve and archive atmospheric, pavement condition, and hydraulic system data. Users can remotely view or back up data. The LAVA DSerial-PCI allows monitoring, administration, software upgrades, debugging, and diagnostics remotely via modem.

LAVA DSerial-PCI used in server of automated de-icing system.

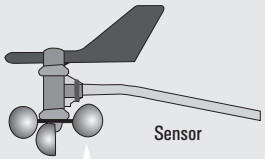


LAVA DSerial-PCI

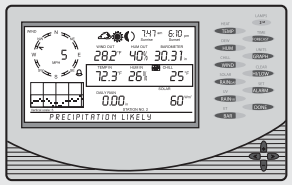
- Adds two high-speed 16550 UART serial ports to PCI-equipped PCs
- Maximum data throughput rate up to 115.2 kbps
- Easy Plug and Play installation
- LAVA Lifetime Warranty

LAVA Ether-Serial Link
for remote weather station monitoring

Field service calls and equipment malfunctions decrease dramatically when instruments can be remotely monitored. Service personnel can monitor conditions in real time and troubleshoot system failures as they occur. The serial ports of **LAVA Ether-Serial Links** are enumerated as true native COM ports—that is, they appear and function as if they are natively attached to the monitoring device.



LAVA Ether-Serial Link connects remote weather sensing devices to central weather station over IP.



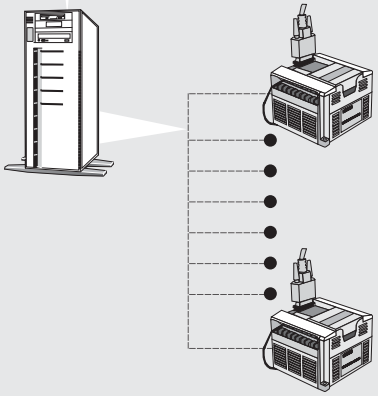
LAVA Ether-Serial Link

- Adds 1/2/4/8 network-enabled RS-232 DB-9 serial ports to any Ethernet network
- Maximum data throughput rate up to 115.2 kbps
- Includes LAVA Ether Link Manager, making this the easiest device in its category to install and use
- LAVA Lifetime Warranty

LAVA Octopus-550
for PLC programming and control

Using only one system IRQ, the **LAVA Octopus-550** enables the management and programming of PLCs — all from one master computer.

LAVA Octopus-550 used to control and program PLCs.



LAVA Octopus-550

- Adds eight high-speed 16550 UART serial ports to any PCI-equipped PC
- Maximum data throughput rate up to 115.2 kbps
- Easy Plug and Play installation
- LAVA Lifetime Warranty

LAVA Products
for oil and gas industry applications

LAVA engineers and manufactures a wide range of high-reliability device server, embedded, and board level hardware interfaces, including:

Serial	
SSerial-PCI	Single 9-pin serial, 16550 UART
RS422 SS-PCI	Single 9-pin serial, 16550 UART, RS-422 pinout
DSerial-PCI	Dual 9-pin serial, 16550 UARTs
DSerial-PCI 3.3V	Dual 9-pin serial, 16550 UARTs, for 3.3 volt PCI
DSerial-PCI/LP	Dual 9-pin serial, 16550 UARTs, low profile w. dual fanout cable
Quattro-PCI	Four-port 9-pin serial, 16550 UARTs
Quattro-PCI 3.3V	Four-port 9-pin serial, 16550 UARTs, for 3.3 volt
Quattro-PCI/LP	Four-port 9-pin serial, 16550 UARTs, low profile w. quad fanout cable
Octopus-550	Eight-port 9-pin serial, 16550 UARTs w. octopus fanout cable
Ether-Serial Link Device Servers	
	1/2/4/8 port, RS-232/RS-422, DB-9/RJ45 serial connectors
Parallel	
Parallel-PCI	Single EPP parallel
Parallel-PCI 3.3V	Single EPP parallel, for 3.3 volt
Other	
8255-PIO	8255 PIO interface card

LIFETIME WARRANTY

About LAVA

LAVA Computer MFG, headquartered in Toronto, ON, Canada, designs and manufactures serial and parallel I/O boards and Ethernet-to-serial device servers. With well over a million LAVA products built into workstations, servers, retail POS systems, and industrial computers since 1984, LAVA I/O boards and Ether-Serial Links are trusted by resellers, distributors, OEMs and system builders in over 47 countries worldwide. Designed for lifetime performance, each LAVA connectivity link is covered by the LAVA Lifetime Warranty. http://www.lavalink.com. **Connect Simply.**