# **GD4010:** Ruggedized Smart Displays for Waste Collection Vehicles



# **Tough environments demand tough solutions**

FleetMind's new GD4010 Smart Display by General Dynamics Canada is a lightweight, rugged touchscreen display that provides waste and recycling organizations with the most robust and the toughest onboard computing platform. In a complete package that is fully-integrated and easy-to-install, the GD4010 provides unprecedented real-time information to drivers and dispatchers about a truck's load-weight, route status, service completion, vehicular telemetry, driver activities and much more.

The GD4010 is part of the General Dynamics tactical computing and display product line for vehicle and handheld applications. It manages a wide range of inputs from a vehicle's on-board systems including cameras, scales, RFID readers, tire pressure and fuel monitoring, as well as other devices. Developed for tanks and harsh military environments, the GD 4010 includes an advanced feature set within a smaller, more compact package eliminating the need for multiple individual components.

### A simpler, more flexible installation **Key Benefits:** camera Designed for demanding operating environments View-able in the brightest sunlight or snow-glare conditions Reduces clutter by combining advanced functionality in a single housing Easily integrates into existing vehicle and back-office systems Multiple inputs for cameras, scales, CANbus, USB and other serial devices Loper Camera Meets the MIL870 standards for shock, vibration and temperature Meets IP65 standards for dust and waterproofing Can be operated with gloved hands 40nt Camera **Advanced features:** AND Reader 10.4" diagonal 1024x768 Vehicle bus (CANbus) pixel, sunlight view-able Scale interfaces display Intel<sup>™</sup> Atom ୶ୖୄ୰ୖ processor: 1.6 GHz, 2 GB Ram, 16 GB SSHD Ethernet, serial and **USB** ports 20dy Scale Micro SD card support Camera/video input VOIP and digitization capabilities Pressure Monito anio P Video switching and multi-plexing, video **Shock detection** \*\*\*\*\* recording & shapshot circuitry capture 4G multi-network and Wi-Fi **USB & Serial** communications **Fleet**Mind CANBus Wi-Fi, Ethernet & Video



The GD4010 has the following distinct advantages over other display products:

- Most powerful display/computing platform on the market
- Durability and leading-edge technology ensures long-term ROI
- Easier to install
- All-in-one unit eliminates need for multiple solutions
- Military grade unit can withstand toughest environments
- Runs the latest Windows
  embedded versions
- Expanded memory and superior processing power
- Shock detection for accident and vehicle damage alerts
- · Video recording and ability to see live camera feed from back office
- Picture capture capabilities
- Integrates with FleetMind scales and RFID reader
- Automated service verification
- J1939 and J1708 support (J1708 requires converter)
- · Improved driver experience
- Improved safety due to automation and reaction speeds
- · Complete visibility in direct sunlight or snow glare
- Touchscreen can be operated with gloves
- Ensures real-time remote connectivity between back office and vehicle



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## **Technical Specifications**

## PROCESSING

#### Robust computing capabilities ensure longevity

- Windows Embedded Standard 7
- Intel ATOM E680T processor operating at 1.6 GHz
- · Intel EG20T I/O Hub
- · 2 GB DDR2 SDRAM
- · 16 GB Solid State Drive
- · Support for MicroSD storage expansion card

## DISPLAY

#### Advanced touchscreen is easier to use

- · 10.4" touchscreen display
- 1025 x 768 resolution (XGA)
- · Resistive touchscreen suitable for gloved operation
- · Anti-glare protective glass
- Adaptive backlight technology
- · 500:1 minimum contrast ratio
- · Automatic ambient light adjustment
- Viewable in bright sunlight or snow glare

## **I/O AND DATA ACQUISITION**

### Advanced connection capabilities

- · 4 Discrete Digital Inputs
- · 4 Discrete Digital Outputs
- 1 amplified audio output
- 1 microphone input
- · 2 CAN interface for connection to the truck ECM
- Triaxial accelerometer for 3 dimensional shock detection
- · High precision GPS receiver (3m resolution)

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### **VIDEO**

#### Complete and real-time visibility

- Integrated QUAD video switcher / multiplexer
- · Supports up to 4 truck cameras with audio and power
- · Video recording from any of the 4 connected truck cameras
- Snapshot capture from any of the 4 connected truck cameras
- · Remote live video streaming

## COMMUNICATIONS

#### Advanced communications capabilities

- Integrated GOBI3000 Multi-network modem (supports EVDO and HSPA)
- WiFi client or hotspot
- Voice over IP support
- · 2 serial ports
- · 2 Gigabit Ethernet Interfaces
- 2 USB ports

## **ENVIRONMENTAL STANDARDS**

## Withstands extreme temperatures and conditions

- · IP65 dust and water proofing
- · Mil-STD-1275B for voltage fluctuations
- MIL-STD-810F for shock and vibration
- · Operating range from -30C to +70C
- Storage Temperature from -30C to +80C
- MIL-STD 810F for aggravated temperature and humidity cycles
- · FCC47 part 15
- · CSA Approved

FleetMind Solutions, Inc. is the award-winning technology leader for fleet management solutions. FleetMind's technology is derived from over 10 years and millions of dollars invested in developing the industry's best and most advanced fleet solutions specifically designed for waste and recycling environments. FleetMind solutions have been successfully installed in thousands of vehicles across North America. Our products have allowed the industry's largest waste and recycling fleets to link their drivers and vehicles to business operations in real-time to ensure improved productivity, safety, sustainability, profitability and customer service.

FleetMind Solutions Inc. Fleet management solutions for better business results

www.fleetmind.com 888 639 1666 ext. 350