

# The Excellerant UMI

## The Universal Machine Interface (UMI)

### NETWORK INDEPENDANT

With Gigabytes of local file storage, the Excellerant UMI ensures your files are always available to your CNCs.

### DNC LOAD CHOICE

The UMI comes with DNC built-in - just upload via serial port, mapped drive (SMB), FTP, USB stick, or push the file you need on our UMI web screen...

### TECHNICAL SUPPORT

Excellerant is here to help. We also offer direct online collaborative installation and training!



### SECURE DNC & DATA COLLECTION

The Excellerant UMI is a smart IIoT Edge Device designed to deal with CNC machine tool connectivity—handling DNC and MDC. It is a CNC co-processor running Linux & thus can upgrade the machine's functionality.

The UMI provides a local file store and TCP/IP connectivity (via Wifi, LAN for DNC, machine monitoring, and MTConnect capabilities) — all with Gigabytes of local FLASH memory & USB support.

### OTHER UMI FEATURES:

- ★ 802.11N (AC optional) WiFi that can use any standard Access Point — no long serial cables means it is easier to install, & maximizes CNC serial upload speeds.
- ★ Gigabit Ethernet enables Wireless to LAN drive mapping & we enable FTP.
- ★ The UMI get its power from the machine - it can take 7-30VDC 500mA (max) - plug & play for Fanuc Controls—the unit can now be USB powered too.
- ★ Magnetic mounting for easy installation.

- ★ Adds wireless DNC & USB to any CNC.
- ★ Embedded DNC with Fanuc M198 Remote Subprogram Call Support—great for pallet systems.
- ★ Direct DNC connection maximizes serial transfer speeds with no data loss.
- ★ An ORION can operate standalone, so a network issue doesn't stop work.
- ★ Linux-based hardened Quad Core 32 bit Processor box with no moving parts that connects to any network—solid state.
- ★ Allows for Fanuc FOCAS to flow-through—DPRNT & MTConnect as well.
- ★ The UMI's 2nd serial can be used for handheld terminals.
- ★ It can use standard USB devices—like USB bar code readers, 1D/2D & QR Bluetooth Readers + RFID readers.
- ★ SAMBA Server enables mapped drives to a CNC (Ethernet) & to a Network Server (Wifi) for flexibility.
- ★ Remote "DIR" command makes getting long file named parts easy.



The UMI Version with Quad Core 32 bit ARM H3 Processor, USB (x2), & Dual Serial Ports—software from Nexus Networks Inc.





## UMI Wireless DNC

The new Excellerant Universal Machine Interface (UMI) is a next generation wireless DNC smart edge device, that enables any CNC to be part of an Industry 4.0 solution.

The powerful and open UMI gives you more choices on how to deploy and manage your NC program files with wireless DNC data routing built-in. The UMI also has an internal expansion slot for more exciting future options.

Operators can easily pull needed files from a central server, or from the UMI locally, to get up and running fast...

### SERVICES AVAILABLE

**MDC & DNC Software**  
**Hardware Adapter Support**  
**Technical Support**  
**Installation & Setup**  
**Application Support**

#### Excellerant Universal Machine Interface (UMI)



## Universal Smart IIoT CNC Adapter

- ★ Files stored in the internal memory or the UMI can be called from the CNC control by remote commands, and loaded to memory in the CNC or drip fed.
- ★ Files can be called from the Network server, where they are stored by the CNC control and loaded into the Internal memory on the UMI using standard SMB Ver 2 mapped drive protocols.
- ★ Files stored on a server can be called from the CNC control to be directly loaded into the CNC memory or run in drip mode.
- ★ Files can be loaded into internal memory of the UMI with a USB stick. Using the USB "PUSH" feature. These files are then pushed serially from the UMI when the USB stick is inserted.
- ★ Files can also be transferred into a "PGMPUSH" folder in the UMI to be sent to the machine immediately. Just hit READ or CYCLE START and the file in the "PGMPUSH" folder is read into the CNC or transferred into a "PGMPUSH" folder in the UMI to be sent to the machine immediately. Just hit READ or CYCLE START and the file in the "PGMPUSH" folder is read into the CNC.
- ★ Simple remote call and save procedures—with bar code support.
- ★ Adds Mapped Drive file transfer to any CNC, or use FTP.
- ★ Adds bi-directional USB backup support, and inbound only for files for ITAR (CMMS) applications.

### COMMUNICATION

- ◆ Gigabit Ethernet port
- ◆ 802.11 N or AC WiFi connection (external magnetic mounted antenna supplied)
- ◆ 2 x RS-232 DB9 Serial Port for DNC (to 115k BAUD)
- ◆ 2 x USB 2.0 ports

### FILE STORAGE

- ◆ 16 Gigabyte Internal SD Flash Drive—with minimum 6 Gigabytes for Part Programs
- ◆ FTP & Mapped Drive Support
- ◆ USB Data Stick Compatible

### INTERFACE OPTIONS

- ◆ Any browser can talk to the UMI — PC, MAC, laptop, tablet, smart phone, IOS device...
- ◆ USB supports Bar Code Readers, Cameras, Data Sticks, etc...
- ◆ Works with Excellerant DNC & MDC software

**Excellerant, Inc.**  
**27 Quality Avenue**  
**Somers, CT USA**  
**06071**

**Phone: 860-870-5544**  
**sales@excellerant-mfg.com**  
**www.excellerant.mfg.com**