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## Plug and play gravimetric control with Ethernet connectivity

## *UNILINE feeder controllers for distributed control systems*



- Plug and feed gravimetric control for screw and vibratory feeders
- **Plug and feed** capable thanks to Ethernet connectivity (RJ45 Plug) the non volatile on board memory and operator software.
- For both continuous and batching (loss or gain in weight) feeding
- High resolution load cell amplifier with user friendly calibration
- Integrated power drive stage for DC motors or resonance vibratory feeders (tachometric coil sensor)
- Electronic over current protection for power drive stage
- Analog drive signal for frequency inverter for AC motors
- On board power supply for 115V or 230V (selectable)
- Supervisory unit in distributed control systems available(SU/DCS)
- Connection to 10/100 Ethernet Networks with standard cables
- Software for operator interface and configuration included
- Software for remote customer support and production data analysis (optional)

## Summary

The Uniline U/DCS unit is based on reliable and high performance technology which meets the requirements of high precision feeding processes. It is designed to provide a powerful price to performance ratio and ease of use. The Ethernet connectivity allows Plug and Play use either through existing or stand alone Ethernet networks. Plug and Play connection to the SU/DCS unit (Supervisory touchpanel in a distributed control system) is made with standard CAT5 Ethernet cables. Maximum IEEE 802 cable length is up to 100 meters per network segment.. Most standard Ethernet devices (including switches, hubs and gateways) are supported. A single touchscreen operator interface can be used for all connected U/DCS units as if they were part of a feeding line or otherwise as standalone feeders. The powerful and easy to use operator control software is designed to work with Windows 2000 Pro or Windows XP operating systems. The operator software fully supports Plug and Play operations and devices.

## Software applications

PC advanced configuration software included. This can store an unlimited number of recipe into a database.  
PC control software (MMI) with production backup function available.  
PC production History reconstruction software available

## Integrated digital load cell amplifier

The on board high resolution digital load cell amplifier allows easy, fast and user friendly calibrations. Multi step software selectable damper for harsh industrial environments. Four or six wires 2mV / V load cell sensors are supported. Up to 3 load cell sensors (350 Ohm). can be connected to a single controller. 1000 Ohm load cells supported in case more than 3 load cell have to be connected in parallel.

## Integrated power drive stage with over current protection

DC motors up to 2 Amps and resonance vibratory feeders (only those with inductive tachometric sensor) can be directly connected to the internal power drive stage without the need of an external drive stage.

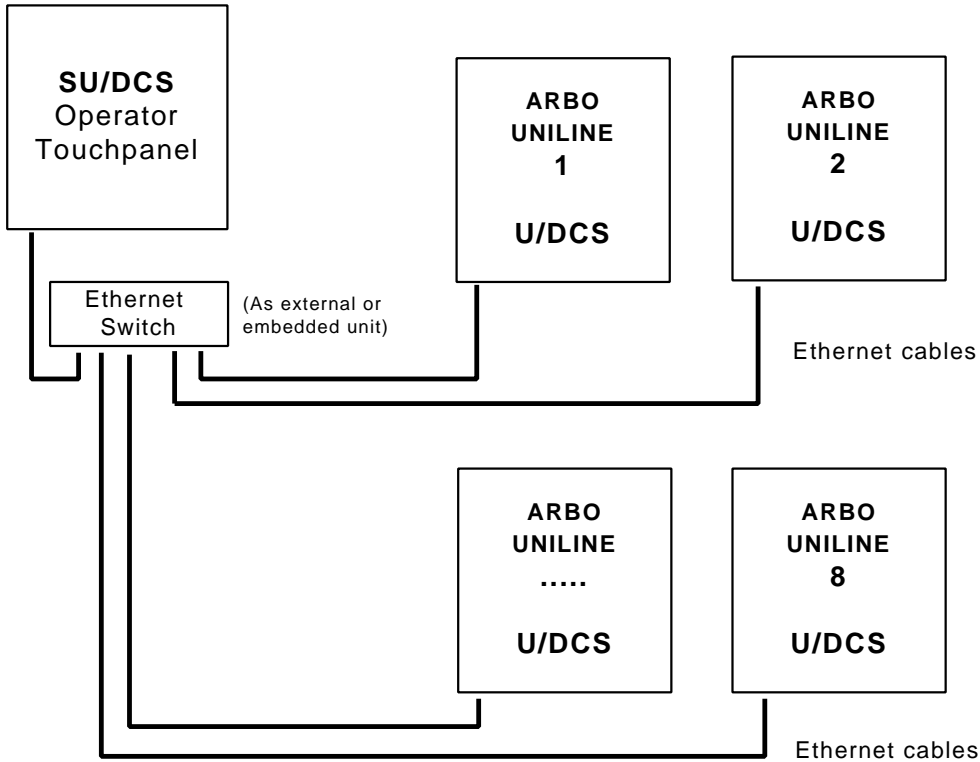
## External drive units

An analog 0 to 10V or -10V output is available to manage an external drive unit for AC motors or vibratory units.

## Integrated power supply

The on board Hardware switch (selected before delivery at the factory) allows to use the same unit in 110 V or 230V 50/ 60 Hz networks without the need of external power supply units or adapters.

## Application example



## Technical specification

- Enclosure : Plastic enclosure with removable cover. Can be directly mounted on the feeder.  
Dimensions 380 x 280 x 135 mm
- Power : 120 or 230 [VAC] +/- 10 %
- Model : : U/DCS 50 or 60 [Hz] (Has to be specified when ordered)
- Load cell sensor : 2 [mV / V] Advised precision class C3
- Number of LC sensors : Up to 3 load cell sensors (350 Ohm) can be connected in parallel.  
If more than 3 load cells have to be connected use 1000 Ohm load cells.
- Load cell amplifier : High resolution on board load cell amplifier with two step user friendly calibration
- Power drive stage : On board for vibratory feeders with tacho coil and DC motors up to 2A
- Analog output : Analog output to drive external frequency inverter for AC motors
- Ethernet Interface : Industrial RJ45 Ethernet Plug.  
Standard Ethernet connectivity with related diagnostic commands such as Ping, ARP, ...  
Transmission through TCP protocol for correct and connection oriented data delivery.
- Relay digital outputs : Refill, Running, Alarm