

OptiFlex™ Central Drying Hopper System Control

For up to 3 Central Dryers and up to 48 Central Drying Assembly Hoppers

The NOVATEC OptiFlex Color Touch Control Provides Touch Screen Convenience With Intuitive Icons for Optimum Control of a Central Drying System

A central dryer provides dry air, through a manifold line, to multiple hoppers, often of varying sizes and containing different materials. Each hopper has a dedicated heater/blower designed to provide proper air flow to that particular hopper. The OptiFlex (OFX) central drying control utilizes a 12" color touch screen which communicates with all components (heaters, sensors, switches, etc.) of the central drying system.



12" OptiFlex Color Touch Screen

12" Color Touch Screen With Intuitive Icons

OptiFlex icons are simple, intuitive and easy to understand for experienced and novice operators alike.

Configurable and Expandable

The basic OptiFlex PLC is pre-programmed to monitor and control up to 8, 12, or 16 Central Drying Assembly Hoppers and monitors up to 3 Central Dryers.

Remote Opti-FlexXpand Modules Add Capabilities

The addition of remote OFXM I/O panels, networked via Ethernet cable, permits expanded control of up to 48 Central Drying Assemblies. Capability must be added to the control in increments of 4, 8, 12 or 16.

Central Control & Monitoring

Temperature, alarm and energy-saving set points are easily entered for each drying hopper and automatically monitored and key process values stored as recipes in a convenient material library.

Assure Material Readiness

Pre-Dry countdown timer prevents undried material from being delivered to your process when linked to a FlexXpand Central Conveying Control.

Moisture Manager Option

(Patent # 6,289,606)

Moisture Manager monitors the humidity profile of the drying hopper to prevent over-drying of materials like nylon and some polyesters.

OverDry Protection and Energy Saver

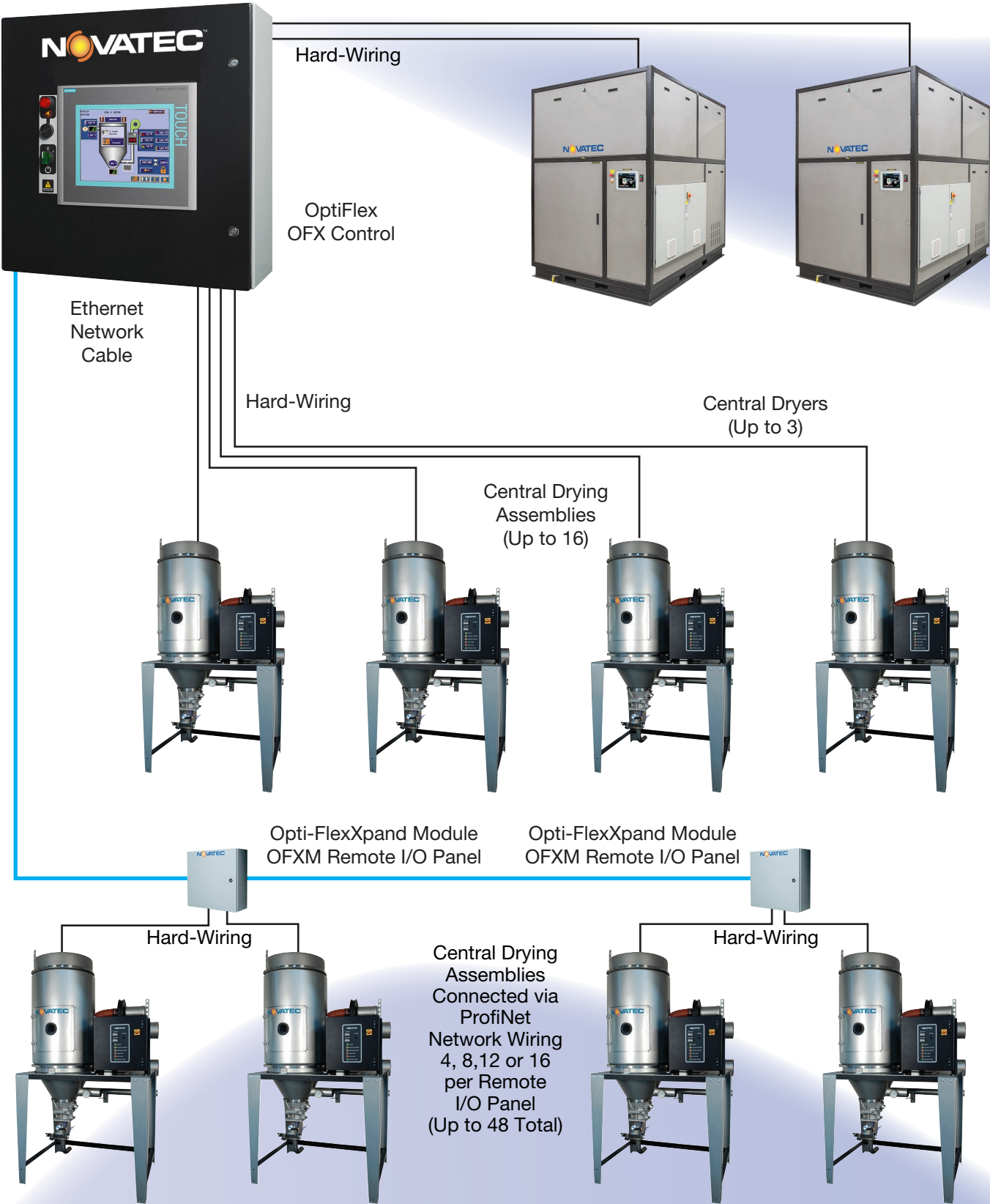
OverDry Protection prevents the overheating of dried materials and saves energy by actively monitoring the return air temperature of each drying hopper in the system, and adjusting the drying temperature when process demands are reduced.

Plus:

- 120 VAC Standard (230VAC optional)
- Communicates with other Novatec ColorNet HMI's
- Communicates with PC's or other email devices via internet
- Includes alarm indicator light and piezo alarm
- 2-Year warranty



Typical Wiring/Network Options



Components



Main Opti-Flex Control Panel

Basic OFX Control Panel monitors up to 3 central dryers and controls either 8, 12 or 16 Central Drying Assembly Hoppers.



Opti-FlexXpand Modules (OXFM)

Modules are connected to main OFX Control panel by ProfiNet cable and control either 4, 8, 12 or 16 Central Drying Assembly Hoppers with complete monitoring and alarm capabilities.

Central Drying Assembly

The CDA consists of a fully insulated drying hopper on a stand with a properly sized blower and a heater capable of drying temperatures up to 350°F. (175° C). The stand air manifolds are of a uniform height so 8" Process and return headers plus 3" dry air purge headers are ready to connect side-by-side with other CDA units. Hopper capacities range from 60 to 2500 lb. (27kg – 1136 kg) based on a bulk density of 38 lb./ft³. (See Central Drying Assembly data sheet)



NovaWheel™ Central Dryers

NovaWheel Central Dryers are available with throughput capacities of 200 through 5,000 lb./hr. They provide constant -40° dew point process air to multiple Central Drying Assembly Hoppers.



Ethernet Connects Your FlexXpand to the World

Every OptiFlex Control can be accessed via the web by any PC, anywhere in the world. Actual screens are displayed on the PC monitor and changes can be made easily with the click of a mouse. Multiple security levels and access are pre-programmed with selectable passwords to prevent unauthorized viewing or changes.

View alarm logs, program material changes, monitor pump run life... all on line, from anywhere and with the help of intuitive graphics and self-explanatory icons. In addition, when programmed to do so, OptiFlex can automatically email system alarms to any email account on a PC, Smart Phone or Tablet.

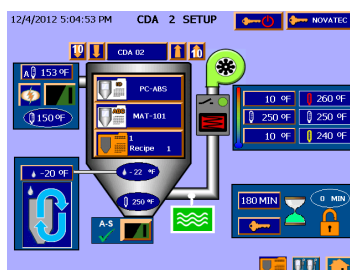


The PLC-Driven OptiFlex OFX Touch Screen

...provides an extremely intuitive display of all drying functions through the use of highly graphic and colorful interactive icons, personalized descriptive text and effective alarm messages. Changes to operating parameters can be made easily, with assignable levels of security, on intuitive input screens with instant feedback of accepted changes and ultra logical screen navigation.



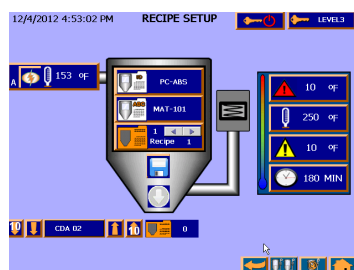
System Setup



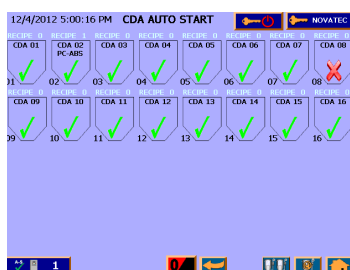
CDA Hopper Setup



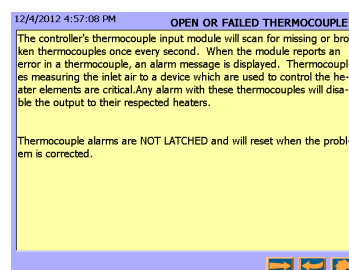
CDA Hopper Status



Material Recipe Setup



CDA Auto Start Setup



Built-in Help Pages

With the Ethernet capability of OptiFlex, all pages and all of the control's intuitive graphics can be accessed remotely on any PC. Monitor and make changes with the click of the mouse.

Specifications:

Component	Panel Input Voltage	Dimensions W x H x D		Amps Required		CDA Hoppers
		in.	mm	115V	230V	
OFX-8-12C	115/230 VAC	24 x 30	610 x 762	6	3	8
OFX-12-12C	115/230 VAC	24 x 30	610 x 762	6	3	12
OFX-16-12C	115/230 VAC	24 x 30	610 x 762	6	3	16
OFXM-4	115/230 VAC	20 x 24	508 x 610	6	3	4
OFXM-6	115/230 VAC	20 x 24	508 x 610	6	3	8
OFXM-8	115/230 VAC	20 x 24	508 x 610	6	3	12
OFXM-12	115/230 VAC	20 x 24	508 x 610	6	3	16

Add -MM to OFX Model number for Moisture Manager Models

Options

- **Ethernet Switch, 5-port:** (for main panel - required for remote HMI and multi-directional network connectivity.
- **230 V Panel Input Power:** (all models, 24 VDC I/O only)
- **Alarm strobe:** (must match panel I/O voltage) 24 VDC
- **Ethernet Communication Cable**
- **Ethernet Cable Connector**
- **Ethernet Repeater Switch-Nema 4:** Stand alone installation 115 VAC input power required.
Required to extend single network greater than 100m
- **Remote Touch-Screen HMI:** (12" color)