

netDimmer - Remote LED Dimming Interface Unit

netDimmer provides remote control of up to 4 separate LED lighting circuits using Ethernet or 802.11 b/g wireless networks. netDimmer can be used stand-alone (AdHoc) with any tablet/iPad/iPhone/SmartPhone or attached wirelessly to a local router (infrastructure) for network control. netDimmer is also compatible with new MiFi cellular based devices, GPRS modems, and personal HotSpots for remote internet access within coverage areas.

A Built-in Server hosts Web pages that allow user control of any of the LED Light circuits. The netDimmer web pages are completely customizable using the browser interface to match any installation. All positions can be custom labeled. Current switch state is constantly monitored and shown on the browser page. Up to 16 different units can be monitored and controlled.

New Generation-2 features allow the adapter to receive commands directly from netGauges.net™ gateways over an existing Ethernet or wireless network connection. This advanced feature allows any netGauges Analog Sensor gateway to control LED Lighting Levels based on sensor detection thresholds. In addition, netDimmer can also receive commands from the HelmSmart Cloud service allowing for centralized control. The HelmSmart service can actively monitor 1000's of networked sensor signals and remotely adjust light output levels based on need.

When paired with a netGauges Analog Sensor Gateway, a complete stand-alone closed loop control system can be created. For example, ambient light detected by a netGauges Gateway can create a command message to be sent over the network to a netDimmer unit to decrease Lights during daytime.

netDimmer driver options include multiple TRIAC, 0-10 Volt, and direct PWM circuits. TRIAC is ideal for existing 2-wire AC mains and can support up to three separate dimmable loads to 8 amps each. Direct 3 channel PWM options are available for 12-32 VDC and 120VDC LED lights up to 18 amps per circuit. Channels can be combined for RGB LED lights. PWM offers higher resolution control and the most efficient energy profiles. A 0-10V control option is also available for 4-wire lights.

The rugged water-resist design features 12-pin flying lead harness for secure connections and easy installation. A 4-pin twist-lock Conxall Mini connector provides the Ethernet interface with included mating 15' Cat5 patch cable. This design prevents cable engagement failures common with RJ45 connectors and provides enhanced environmental protection. A 5-pin Mico-C style CAN Bus/NMEA 2000 option is also available to network multiple dimmers as slave devices to a single master controller. Zigbee/Xbee mesh networking option provides wide area distribution of individual dimmer modules for campus and grid deployments.



Model Number	NDRMTRIAC	NDRMPWM	NDRMVC	NDRMZB
Dimmer Channels (control/slave)	3X2 @4 amps	3X3 @ 6 amps	6 @ 0-10VDC	1 @ 6 amps
Dimmer Output type	Forward Phase TRIAC 85-260 VAC	PWM @300 Hz 12/24/36VDC, 160VDC	0-10 VDC @ 25mA	PWM @300 Hz 12/24/36VDC, 160VDC
SD Memory Storage (removable)	4GB	4GB	4GB	
Serial Port (RS232)/USB Port <ul style="list-style-type: none"> Supplied weather-resist USB - 2m Supplied PC Instrumentation S/W for live view 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Ethernet Port (10/100 Base-T) <ul style="list-style-type: none"> Supplied weather-resist RJ45 patch cable-3m 5-pin micro Twist-lock connector 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	*
WiFi Port (802.11 b/g) 2.48 GHz <ul style="list-style-type: none"> Supplied 6" di-pole or Optional remote Antenna Range of 300' 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	*
Zigbee/Xbee Mesh <ul style="list-style-type: none"> Spans large area peer-to-peer Multi-node self configuring WiFi 				<input checked="" type="checkbox"/>
CAN Bus/NMEA 2000 <ul style="list-style-type: none"> 5-Pin Mico C Self Powered via N2K cable 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	*
Embedded Web Server <ul style="list-style-type: none"> Included Web Pages for live view 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	*
Network Protocols <ul style="list-style-type: none"> TCP - Single Client UDP - Broadcast 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	*
Remote Access via Internet <ul style="list-style-type: none"> Direct Push to netGauges.net 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	*
Power Supply	110-260 VAC	12V-160 VDC	110-260 VAC	110-260 VAC
Supply Current	20 A	20 A	1 A	6A
Enclosure Material	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
Dimensions	6"X8"X2"	6"X8"X2"	6"X8"X2"	4"x2"x2"

* Requires separate gateway – multiple dimmer modules are inter-connected via central gateway device

denotes product configuration option