

H663 Series

Branch Circuit Monitor Split-Core (Modbus® RTU)

The split-core branch circuit current monitoring system provides a cost-effective solution for electrical load management. It is ideally suited for applications where load capacity requirements are dynamic, such as the growing data storage industry and lighting.

The H663 monitors the current draw of each breaker in a panelboard. The accumulated information can be transmitted to a Modbus host and/or viewed on an optional local display via an RS-485 network. Data updates occur approximately once per second to provide timely preventative maintenance information. As a circuit approaches capacity, warning and alarm levels trigger (see graph below). Additional capacity can then be added, or loads balanced, to prevent costly downtime from overloaded circuits and unexpected breaker trips.

A simple solution for individual circuit current monitoring

- Each H663 reports current consumed on each circuit in the panel board...one product covers multiple points
- Provides Modbus registers for current limit warnings and alarms...prevents breaker trips
- Integrates with available network display for local indication

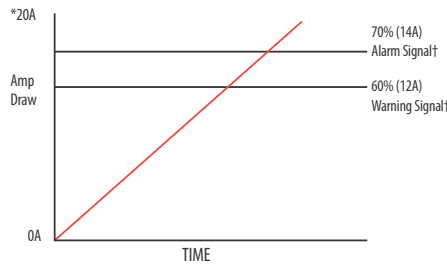
Split-core design and network compatibility... ideal for retrofit applications

- Up to 63 H663s can be networked on one Modbus RS-485 drop...simplified wiring
- Split-core CTs are perfect for quick installation on critical load applications that can't be powered down

APPLICATIONS

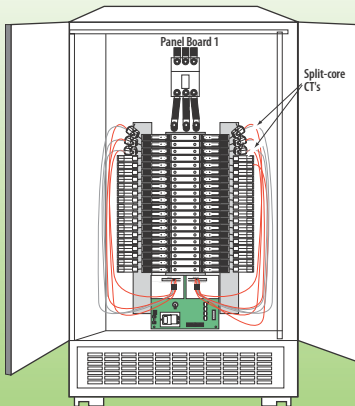
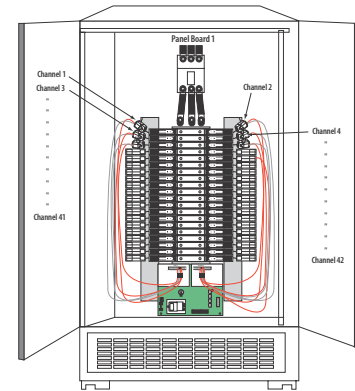
- Retrofit panel boards
- Load based cost allocation
- Overload protection
- Load management
- Load balancing
- Lighting circuits

OVERLOAD SIGNALS



*Example represents 20 Amp circuit
†Configurable time delay for alarm and warning

TYPICAL PANELBOARD INSTALLATION



ORDERING INFORMATION

MODEL	# OF CTs	AMP RANGE	OUTPUT
H663SM-42**	42	Up to 50A* (configurable)	RTU Modbus†
H663SM-30**	30		
H663SM-24**	24		

NOTES:

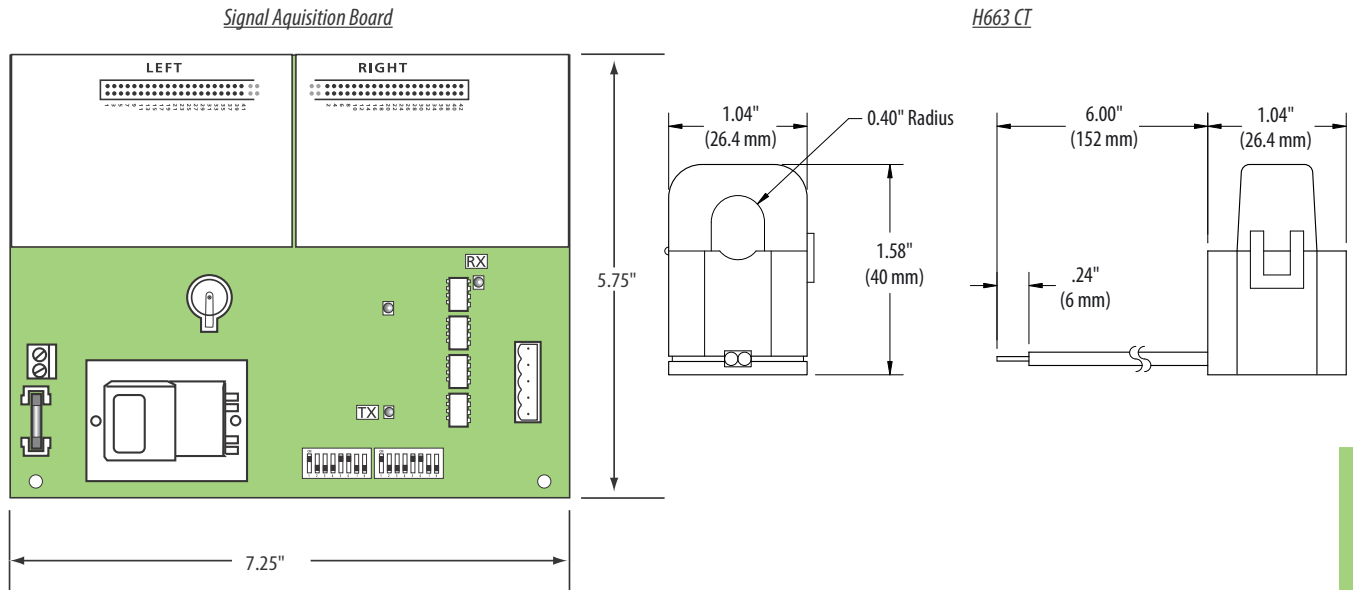
*Hole size accommodates up to 1AWG insulated conductors.

†Other protocols available, consult factory.

**For custom applications monitoring a different number of circuits, please contact factory.



DIMENSIONAL DRAWINGS



SPECIFICATIONS

General

Operating Temp. Range	0 to 60°C (<95%RH, non-condensing)
Storage Temp. Range	-40°C to 70°C
Power Source	120VAC (+10/-25%) line-to-neutral, 50/60Hz.

Measured Current Inputs

Number of Channels	up to 42
Frequency	50/60Hz.
Sample Rate	1280Hz.
Update Rate	1.2 sec
Accuracy	±5% of reading from 5A to 50A
Connection to Conductor	Split-core CT†

Network Communications

Type	Modbus® RTU
Connection	DIP-switch selectable 2-wire or 4-wire
Address	DIP-switch selectable address 1 to 247
Baud Rate	DIP-switch selectable 2400, 4800, 9600, 19200
Parity	DIP-switch selectable NONE/ODD/EVEN
Communication Format	8 data-bits, 1 start-bit, 1 stop-bit
Termination	5-position pluggable connector (TX+ TX- SHIELD TX+/RX+ TX-/RX-).

Defaults

Warning Register	60% of current sensor rating (configurable)
Alarm Register	70% of current sensor rating (configurable)
Current Settings	20 Amp.

Dimensions (Circuit Board Only)

Mainboard... (L x W)	7.25" x 5.75"
Split-Core CT's (6' leads)	1.04" x 1.04" x 1.58"
Mainboard Bracket... (LxWxH)	11.37" x 5.75" x 1.12"

† Do not apply 600V Class current transformers to circuits having a phase-to-phase voltage greater than 600V, unless adequate additional insulation is applied between the primary conductor and the current transformers. Veris assumes no responsibility for damage of equipment or personal injury caused by products operated on circuits above their published ratings.

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