

## MicroNet HD Combo Modules 5466-253 and 5466-316

### Issue

The subject modules provide a combination of eight Analog Inputs, four Analog Outputs, four Speed Inputs, and two Proportional Actuator Outputs. These older modules have significant component obsolescence issues and will be replaced by improved Combo Modules based on Woodward's modern "Smart-Plus" architecture.

### Description

The new modules provide four analog outputs (which can be used to drive 4-20mA proportional actuators), twelve analog inputs and four speed inputs. The new modules provide many performance improvements:

- Enhanced speed sensing, including improved resolution, throughput time, noise filtering and channel to channel isolation. There are two versions available – standard speed accuracy (meets/exceeds HDCombo accuracy), and high speed accuracy, which is primarily intended for Gas Turbine applications but can be used for Steam as well when higher accuracy is desired.
- Acceleration sensing improvements – improved resolution, accuracy and noise filtering.
- Analog input channel improvements – improved resolution, accuracy, throughput time, channel to channel and channel to ground isolation.
- Actuator/analog output improvements – improved resolution, accuracy, open wire detection, isolation and noise filtering.

The new HD Combo modules have GAP-selectable Speed and Analog Input types, so either the standard or high-accuracy version can be used in both MicroNet Plus<sup>(1)</sup> and 5200-based TMR<sup>(2)</sup> systems. See the table below for FTM application.

#### Notes:

1. MicroNet Plus systems utilizing the new module will require Coder MicroNet 1.0 or later.
2. MicroNet TMR systems utilizing the new module will require Coder Version 5.08 or later.
3. Customers with 040 or Pentium/NT CPUs should continue to utilize 5466-253 and 5466-316 for spare parts and system expansions.

### Affected Units

Existing P/N	Description	Existing FTM	Replaced By	New FTM
5466-253	TMR High Density Combo I/O - 4 MPU's, (8) 0-5 Volt Inputs, 4 4-20 mA Outputs, 2 Prop. Actuator Outputs	2 x 5501-365	5466-1115 (Standard Accuracy) or 5466-1105 (High Accuracy)	1 x 5501-372 1 x 5501-502
5466-316	Simplex High Density Combo I/O - 4 MPU's, 8 4-20 mA Inputs, 4 4-20 mA Outputs, 2 Prop. Actuator Outputs	5501-371	5466-1115 (Standard Accuracy) or 5466-1105 (High Accuracy)	1 x 5437-523 1 x 5501-376

### Corrective Action

The replacement modules require GAP updates as noted above and utilize different FTMs and cables. For this reason, the old modules will continue to be available for users needing spare parts and or system expansion.

Because the existing HD Combo modules and matching FTMs will remain available, Woodward is not offering last time buy opportunities.

## ***Customer Action***

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Please switch new system orders to the updated HD Combo module as soon as reasonably possible. This helps Woodward preserve obsolete part inventory so that we can continue to offer the 5466-253 and 5466-316 modules as long as possible for spare parts or to expand existing systems.

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