MS3Pro EMS Comparison Guide

SO WHAT'S THE DIFFERENCE?







EVO (REPLACES 1ST GEN)



ULTIMATE

FEATURES

VE based tuning			
Speed density		\mathbf{r}	
Alpha-N		\mathbf{r}	
MAF-based			
Blended (mixture of SD, Alpha-N, MAF as needed	\mathbf{V}		
Up to 12 cylinder sequential support			
Unused injector outputs used as digital hi current or PWM			
Distributor	Single/dual	Single/dual	Single/dual
Wasted spark			
Coil per plug			
Per cylinder table-based corrections for fuel & spark			
O2 per cylinder supported			
Table switching for multiple fuel trims			
VVT control	4 channels	4 channels	4 channels
Odd fire engine supported			
Rotary supported			
Internal hi-speed datalogging			
Datalogging speed	120 hz	330 hz	330 hz
No. channels datalogged	30	64	64
Real time calendar clock (RTCC)			
Onboard traction control & configurable vehicle response	Multiple strategies	Multiple strategies	Multiple strategies
Alcohol & flex fuel supported			
Wideband support	ALL OEM & aftermarket	ALL OEM & aftermarket	ALL OEM & aftermarket
Nitrous control	2 channels, staged or progressive	2 channels, staged or progressive	2 channels, staged or progressive
Boost control	Multiple open/closed loop strategies	Multiple open/closed loop strategies	Multiple open/closed loop strategies
Transbrake control			
Idle control	Multiple open/closed loop strategies	Multiple open/closed loop strategies	Multiple open/closed loop strategies
Water/methanol injection			
Fuel pump control	On/off or PWM	On/off or PWM	On/off or PWM
DSP based knock detection	2 channels	2 channels	2 channels
Configurable engine safeties & vehicle response			

INPUTS & OUTPUTS

Peak & hold injector outputs (Programmable 4:1 or 8:2)	0	0	10 channels
Saturated injector outputs	12	12	2
Low impedance injectors supported			10 channels
High impedance injectors supported	$\mathbf{\underline{\checkmark}}$		10 channels + 2 stage
Ignition outputs	8+2	8+2	8+2
Digital inputs	4	4	7
Digital input or output (dedicated)	0	0	5
PWM outputs	3	3	5
Digital output (dedicated)	0	0	2
Analog inputs (spare)	3	7	8
Hi Current outputs	2	2	2
Digital frequency inputs	3	3	3
Variable reluctor conditioned inputs	2 channels	4 channels	4 channels
Onboard MAP sensor		4 BAR	4 BAR
Onboard baro sensor			
5V Ref			2 (separately fused)
Keep alive memory (KAM)			
CANBUS			
Serial			
USB			
Visual diagnostics			
Water resistant enclosure		IP65 rating	IP65 rating

