

Autologic Technical Specifications



BMW

1. BMW PRODUCT DESCRIPTION

The *Autologic* diagnostic tool for BMW vehicles is without doubt the most comprehensive tool to be made available to independent BMW specialists. The world-first software enables access to full dealer-level capabilities that initially covers E31, E32, E34, E36/Z3, E38, E39, E46, E53, E60, E61, E63/64, E65/66, E70, E71, E81, E82, E83, E84/Z4, E85, E87, E88, E90/E91/E92/E93, R50, R52, R53, R56.

Autologic for BMW is unique in offering full fault code read and re-set, full component activation, electronic control unit procedures, clearing and setting of adaptation values, full coverage of (ECU) control units coding, full programming capability including engine control modules and transmission control modules, adjustment of engine idle, real-time reading of all dynamic data, procedure for engine and immobiliser alignment, procedure for trial substitution of control units and procedure for the fitting of BMW accessories. Car/Key Memory Function for personalising vehicle.

Systems accessed by the tool include:

- Service Interval reset including CBS, CBS error correction
- Quick Test & Quick Clear
- Engines
- Transmissions
- ABS/Adaptive Stability Control/ Dynamic Stability Control
- On-board Computer
- Multi Information Display Systems
- Multiple Restraint Systems
- Central Body Electrics
- Alarm System
- Electronic Vehicle Lockout (EWS)
- Cruise Control
- Multi-functional Steering Wheel
- Air Conditioning Systems
- Instrument Cluster Electronics (IKE)
- Lamp Control Module (LCM) (LSZ)
- Park Distance Control and Radio.
- Roll over system / convertible hood module
- Automatic interval control
- Rain light sensor
- Seat / steering module
- Xenon lights
- Language input system
- Tyre pressure monitoring
- Infrared/Radio remote control
- Display / information systems
- Burglar alarm system (DWA)
- CIP (Coding Individualisation & programming)

Leads & connectors:

- Fibre optic interface
- OBDII connector and 1m cable
- BMW diagnostic connector and 1m cable
- 3m extension cable
- USB connector cable for Internet upgrades

System packaged in a lightweight, rugged flight case

2. DIAGNOSTIC CAPABILITIES

Engines	
	Idle speed adjustment, exhaust gas regulation, limitation of fuel delivery, adjusting of start fuel delivery, calibration of injection map, re-align consumption map, program all diesel engines. Adjustments under DDE 5.0 – electronic compression test, smooth running measurement test. Module information – read and clear fault codes, dynamic data, activation of components, clear and re-set adaptation values.
E60, E63/64, E65, E87 E70, E90	DME 9, MS 70, DME 9.2, MS 45, MS S65, MS 80, DDE 5, DDE 6, DDE 7
VALVETRONIC	
	Communication through DME
E60, E63/64, E65, E87, E70, E90	
TRANSMISSION	
	Read and clear fault codes, diagnosis request, component information, module information, clear adaptations.
E60, E63/64, E65, E87, E90, E70	EGS 19, EGS 19A, EGS 19B, EGS 19C, SMG 60, SSG 60
CAS	Security
	Read and clear fault codes, diagnostic request, module information, personalisation, enable and disable key, DME/DDE alignment, CAS reset.
E60, E63/64, E65, E87, E90, E70	
ACC	Active Cruise Control

	Read and clear fault codes, adjust sensor, module information
DYNAMIC DRIVE	
	Read and clear fault codes, diagnosis request, module information, initialisation, sensor values.
E60, E63/64, E65, E87, E90, E70.	
CIM	Chassis integration module
	Read and clear fault codes, diagnosis request, module information, component activation, CIM adaptation.
E65	
DSC	Dynamic Stability Control
	Read and clear fault codes, diagnosis request, component activation, module information, bleeding facility, hydraulic test, adjust steering angle sensor re-set.
E60, E63/64, E65, E87, E90, E70	
EDC	Electronic Damper Control
	Read and clear fault codes, diagnosis request, component activation, module information, system start up, shock absorber adjustment, shock absorber performance.
E60, E63/64, E65, E87, E90, E70	
EHC	Electronic Height Control
	Read and clear fault codes, diagnosis request, component activation, module information, ride level adjustment, check lift lower function, check ride level sensors, delete energy saving mode, clear air supply system, check compressor relay.
E60, E63/64, E65, E87, E90, E70	
EMF	Parking Brake
	Read and clear fault codes, diagnosis request, component activation, module information, brake bedding-in –procedure, positioning travel check, assembly mode.
E65, E70	
RDC	Read and clear fault codes, diagnosis request, module information.

E65	
PM	Power Module
	Read and clear fault codes, diagnosis request, component activation, module information, register battery replacement.
E65, E65	
DISPLAY INFORMATION	CID, FD, CON, FBI, HUD, INSTR, SVS.
	Read and clear fault codes, diagnosis request, component activation, module information.
E60, E63/64, E65, E87, E90, E70	
AUDIO/VIDEO/NAVIGATION	AMP, M-ASK-CCC, CCC-A, CCC-ANT, CDC, DVDC, SDARS, NAV, VM, DAB.
	Read and clear fault codes, diagnosis request, component activation, module information.
E60, E63/64, E65, E87, E90, E70	
TELEPHONE	TCU/ULF
	Read and clear fault codes, diagnosis request, component activation, module information
E60, E63/64, E65, E87, E90, E70	

LIGHTS	AHL, AHM, LM, RLS
	Read and clear fault codes, diagnosis request, component information, module information.
E60, E63/64, E65, E87, E90, E70	

IHKA/SHZH	Automatic heating air conditioning/Independent auxiliary heating
	Read and clear fault codes, diagnosis request, component information, module information, refrigerant compressor activation run in.
E60, E63/64, E65, E87, E90, E70	
LOCKING & SECURITY	KBM, JBE, TMFA, TMBF, HKL, SHD, DWA, SINE, CA
	Read and clear fault codes, diagnosis request, component information, module information, initialisation, alarm triggers.
E60, E63/64, E65, E87, E90, E70	
SAFETY FUNCTIONS	SGM, KGM, SFZ, SZL, SZM, SBSL, SBSR, TMFA, TMBF, SASL, SASR etc
	Read and clear fault codes, diagnostic request, module information, component activation. Start system time, write system time.
E60, E63/64, E65, E87, E90, E70	
PDC	Park Distance Control
	Read and clear fault codes, diagnosis request, component information, module information.

E60, E63/64, E65, E87, E90, E70	
SEATS	SMFA, SMBF, ALBBF, ALBFA.
	Read and clear fault codes, diagnosis request, component information, module information.
E60, E63/64, E65, E87, E90, E70	
BUS FUNCTIONS	Can Byte-flight, MOST
	Fault codes
E60, E63/64, E65, E87, E90, E70	
CONDITION BASED SERVICE	Service reset function, error correction
E60, E63/64, E65, E87, E90, E70	
CIP	Coding Individualisation & Programming
	Coding of all control units
	Car/Key memory electrical settings
	Programming of control units
	Programming Updates
	Conversion & Retrofitting (Language / CDC / iPod etc)
E60, E63/64, E65, E87, E90, E70, E71	
QUICK TEST & QUICK CLEAR	Scans through ECU's on vehicle for fault codes and reports back, clears fault codes that have been recorded after repair has been carried out.
E31, E32, E34,E36, E38, E39, E53,E83,E85, E60/61, E70 E63,E65/66, E90/91/92/93, E81/82/87/88, R50, R52, R53.R56	

Engines	
	Idle speed adjustment, exhaust gas regulation, limitation of fuel delivery, adjusting of start fuel delivery, calibration of injection map, re-align consumption map, program all diesel engines. Adjustments under DDE 4.0 – electronic compression test, smooth running measurement test. Module information – read and clear fault codes, dynamic data, activation of components, clear and re-set adaptation values.
E32	DME 1.3, DME 3.3, DME 1.7 M70
E34	DME M1.3, DME 1.7, DME 3.1, DME 3.3 M60, DME 3.3 S38 B38, DDE2.1,2.2
E36	DME 1.7, 1.7.2, 1.7.3, BMS 43, DME 5.2, DME 3.1, DME 3.3.1, MS 40.1, DME 3.3, MS S50, Diesel DDE 2.1
E38	DME 3.3, DME 5.2, MS 41.0, MS 42.0, MS 42.1, MS 43, DME 5.2.1 Diesel DDE 2.2, DDE 3.0, DDE 4.0
E39	MS 41.0, MS 41.1, MS 42.0, MS 43.0, DME 5.2, DME 5.2.1, MS S62 Diesel DDE 2.2, DDE 3.0, DDE 4.0
E46	BMS 46, MS 42.0, MS 54, ME 9 Diesel DDE 3.0, DDE 4.0
E53	MS 43.0, DME 7.2, DDE 4.0
E83	MS 45, DDE 5,
E85	MS 43, MS45
R50/R53	EMS 2 (integrated with transmission control unit), MS 5150
EML	
	6 Cylinder & 12 Cylinder
	Read and clear fault codes, diagnostic request, throttle adaptation.
GEARBOXES	
	Read and clear fault codes, diagnosis request, component information, module information, clear adaptations.
E36 AGS/EGS	EGS 8.32, EGS 8.34, EGS 8.55, EGS 9.22, EGS 8.60.0, EGS 8.60.2, EGS 8.60.4, SMG 2
E38	As above excepting SMG 2
E39	As above excepting SMG 2

E46	As E36
E53	GS.20, EGS 8.60.2
E83	GS20
E85	EGS 8.60.4, SMG 2

AIRBAGS	
	Read and clear fault codes, diagnosis request, module information, ECU coding information
E36, E38, E39, E46, E53, E83, E85, R50/R53	SRS, BAE, ZAE, MRS, MRS 2, MRS 3, MRS 4, Safety and information module, Satellite sensors, Start system time.
EWS	Security
	Read and clear fault codes, diagnosis request, module information, ECU coding information, key status (enable or disable), display keys used in vehicle, align EWS to DME or DDE
E36, E38, E39, E46, E53, E83, E85, R50/R53	EWS 2, EWS 3, EWS 3D
ABS/ASC/DSC/DDS	
	Read and clear fault codes, diagnosis request, component activation, module information, bleeding facility, hydraulic test, adjust steering angle sensor re-set.
E36, E38, E39, E46, E53, E83, E85 R50/R53	ABS/ASC 5, ABS/ASC MK 60, ABS/DSC 3, ABS/ASC 5.7, ABS MK IVG, ABS/ASC MK 4, ABS/ASC MK 20, DSC 8
ZKE/ZVM	Central body electrics
	Read and clear fault codes, diagnosis request, component activation, module information, burglar alarm, burglar alarm reader, central locking, electric windows, interior lights, electric mirrors, Servotronic steering, slide/tilt sun roof, soft close boot lid system, windscreen wash-wipe system, seat and steering column, ECU coding information.
E36	ZVM 2, GM 4
E38	GM 3
E39	GM 3
E46	GM 5
E53	GM 3
E83	GM 5
E85	GM 5
R50/R53	BC 1

OM/IKE	Instrument cluster
	Read and clear fault codes, diagnosis request, component activation, module information, system test, service interval re-set.
E36, E38, E39, E46, E53, E83, E85, R50/R53	
IHR/IHKA/IHKR	Air conditioning/heater control
	Read and clear fault codes, diagnosis request, component activation, module information, transportation lock, ECU coding information.
E36, E38, E39, E46, E53, E83, E85, R50/R53	
LKM/LSZ/LCM	Lamp control module/light switching centre
	Read and clear fault codes, diagnosis request, component activation, module information, ECU coding information.
E38, E39, E46, E83, E85	LCM, LCM 2, LCM 3, LS 2, LS 2.2.
CVM	Convertible top
E36, E46, E85, R52	Read and clear fault codes, diagnosis request, component activation, module information, ECU coding information, re-set convertible top reading, roof initialization.
ROPS	Roll-over protection system
E36, E46	Read and clear fault codes, diagnosis request, component activation, module information, ECU coding information, read and re-set trigger counter.
PDC	Park distance control
E36, E38, E38, E39, E53, E83, E85, R50/R53	Read and clear fault codes, diagnosis request, component activation, module information.
DSP	Digital sound processor/amplifier/control panel
E38, E39, E46, E53, R50/R53	Diagnosis request, component activation, module information, speaker test.

RADIO	
E38, E39, E46, E53, E83, E85, R50/R53	Read and clear fault codes, diagnosis request, component activation, module information
MID	Multi-information display
E38, E39, E53	Read and clear fault codes, module information
RAIN SENSOR, DRIVING LIGHTS	
E38, E39, E46, E53, E83, E85 R50/R53	Read and clear fault codes, diagnosis request, A/C initialization
MULTI-FUNCTIONAL STEERING WHEEL	
E38, E39, E46, E53, E83, E85, R50/R53	Read and clear fault codes, diagnosis request, module information, ECU coding information
BMBT	On-board monitor control panel
E38, E39, E53, R50/R53, E83, E85.	Read and clear fault codes, diagnosis request
EDC	Electronic damping control
E38, E39, E53, E60, E65	Read and clear fault codes, diagnosis request, steering angle offset, component activation, module information
EHC, EHC 2	Electronic height control
E38, E39, E53	Read and clear fault codes, diagnosis request, module information, ride level adjustment

HDC	Hill descent control
E53	Read and clear fault codes, diagnosis request, module information
CRUISE CONTROL	Cruise control
E38, E39, E46, E53, R50/R53,	Read and clear fault codes, diagnosis request, module information
SMF/SMB/SPMFT/SPMBT	Electric seats
E38, E39, E46, E53, E83, E85.	Read and clear fault codes, diagnosis request, component activation, module information
LEW	Steering angle sensor
E38, E39, E46, E53, E83, E85, R50/R53	Read and clear fault codes, diagnosis request, module information
EHPS	Electro-hydraulic steering assistance
R50/R53	Read and clear fault codes, diagnosis request, component activation, module information
LRA	Head light vertical aim control
R50/R53	Read and clear fault codes, diagnosis request, component activation, module information
SHD	Sliding - tilt sunroof module
E46, R50/R53, E60, E63, E65, E83, E85, E90	Read and clear fault codes, diagnosis request, component activation, module information & Initialisation
RDC/RPA	Tyre pressure check
E38, E39, E46, E53,	Read and clear fault codes, diagnosis request, module information