

Weidian Computer Technology Co., Ltd.Shanghai

J1939 CAN Serial Connetion Parameters: Default: 250kBaud
Modbus RS485/RS422 Serial Connection Parameters: Default: 9600 bps, 8 Data Bits, 1 Stop Bit, No Parity.
Modbus Protocol Support: RTU Mode, Function Code 3(0x3) & Function Code 16(0x10)
T204 Modbus-J1939 Configuration Registers: 40021-40027
T204 J1939 Modbus Translator Registers: Metric: 40201-40245 English: 40301-40345

Register	PGN #	SPN#	Description	Dec	Units	Range	Length	Scaling	Value for Error(Note 1*)
40021			Mudbus Device Address	0	NA	1-32	UInteger	1	
40022			RS485/422 Baud Rate	0	bps	0-5(Note 2*)	UInteger	1	
40025			J1939 Source Address	0	NA	0-255	UInteger	1	
40026			J1939 Baud Rate	0	kBaud	0-3(Note 3*)	UInteger		
40027			J1939 Destnation Address	0	NA	0-255	UInteger	1	
40201	61443	91	Accelerator Pedal Position 1	1	%	0.0 - 100.0	UInteger	0.1%	FB00h-FFFFh
40202	61443	92	Percent Load at Current Speed	0	%	0 - 250	UInteger	1%	FB00h-FFFFh
40203	61444	513	Actual Engine Per Cent Torque	0	%	-125 - 125	Integer	1%	7E00h-7FFFh
40204	61444	190	Engine Speed	0	rpm	0 - 8031	UInteger	1rpm	FE00h-FFFFh
40206	64966	626	Engine Start Enable Device 1	0		0-3 (Note 1*)	2bits	1	FE00h-FFFFh
40207	65164	1387	Auxiliary Pressure 1	0	kPa	0-4000	UInteger	1kPa	FB00h-FFFFh
40208	65164	441	Auxiliary Temperature 1	0	°C	-40 - 210	Integer	1°C	7E00h-7FFFh
40209	65213	1639	Fan Speed	0	rpm	0-8031	UInteger	1rpm	FB00h-FFFFh
40211	65243	157	Injector Metering Rail 1 Pressure	2	MPa	0.00 - 251.00	UInteger	0.01Mpa	FB00h-FFFFh
40212	65243	1349	Injector Metering Rail 2 Pressure	2	Mpa	0.00 - 251.00	UInteger	0.01 Mpa	FB00h-FFFFh
40213	65243	164	Injection Control Pressure	2	Mpa	0.00 - 251.00	UInteger	0.01 Mpa	FB00h-FFFFh
40214	65253	247	Total Engine Hours	2	hr	0.00-42110812.15	UInteger 32	0.01 HRS	FE000000h-FF000000
40216	65257	250	Total Fuel Used	1	Liters	0.0-421108121.5	Uinterger 32	0.1 Liters	FE000000h-FF000000
40218	65257	182	Engine Trip Fuel	1	Liters	0.0-421108121.5	Uinterger 32	0.1 Liters	FE000000h-FF000000
40220	65262	110	Engine Coolant Temperature	0	°C	-40 - 210	Integer	1°C	7E00h-7FFFh
40221	65262	174	Fuel Temperature	0	°C	-40 - 210	Integer	1°C	7E00h-7FFFh
40222	65262	175	Engine Oil Temperature	0	°C	-273 - 1735	Integer	1°C	7E00h-7FFFh
40223	65262	52	Engine Intercooler Temperature	0	°C	-40 - 210	Integer	1°C	7E00h-7FFFh
40224	65263	94	Fuel Delivery Pressure	0	kPa	0 - 1000	UInteger	1kPa	FB00h-FFFFh
40225	65263	98	Engine Oil Level	1	%	0.0 - 100.0	UInteger	0.1%	FB00h-FFFFh
40226	65263	100	Engine Oil Pressure	0	kPa	0 - 1000	UInteger	1kPa	FB00h-FFFFh
40227	65263	101	Engine Crankcase Pressure	2	kPa	-250.00 - 251.99	UInteger	0.01kPa	7E00h-7FFFh
40228	65263	109	Coolant Pressure	0	kPa	0 - 500	UInteger	1kPa	FB00h-FFFFh
40229	65263	111	Coolant Level	1	%	0.0 - 100.0	UInteger	0.1%	FB00h-FFFFh
40230	65266	183	Fuel Rate	1	L / h	0.0 - 3212.8	UInteger	0.1L/h	FB00h-FFFFh
40231	65269	108	Barometric Pressure	1	kPa	0.0 - 125.0	UInteger	0.1kPa	FB00h-FFFFh
40232	65269	171	Ambient Air Temperature	0	°C	-273 - 1735	UInteger	1°C	7E00h-7FFFh
40233	65269	172	Air Inlet Temperature	0	°C	-40 - 210	UInteger	1°C	7E00h-7FFFh
40234	65270	102	Boost Pressure	0	kPa	0 - 500	UInteger	1kPa	FB00h-FFFFh
40235	65270	105	Intake Manifold Temperature	0	°C	-40 - 210	Integer	1°C	7E00h-7FFFh
40236	65270	107	Air Filter Differential Pressure	2	kPa	0.00 - 12.50	UInteger	0.01 KPa	FB00h-FFFFh
40237	65270	173	Exhaust Gas Temperature	0	°C	-273 - 1735	Integer	1°C	7E00h-7FFFh
40238	65270	106	Engine Air Inlet Pressure	0	kPa	0-500	UInteger	1kPa	FB00h-FFFFh
40239	65271	168	Electric Potential	1	V	0.0 - 3212.7	UInteger	0. 1V	FB00h-FFFFh
40240	65271	158	Battery Potential Voltage (switched)	1	V	0.0 - 3212.7	UInteger	0.1V	FB00h-FFFFh
40241	65271	167	Charging System Potential	1	V	0.0 - 3212.7	UInteger	0.1V	FB00h-FFFFh
40242	65272	127	Transmission Oil Pressure	0	kPa	0 - 4000	UInteger	1kPa	FB00h-FFFFh
40243	65272	177	Transmission Oil Temperature	0	°C	-273 - 1735	Integer	1°C	7E00h-7FFFh
40244	65276	96	Fuel Level	1	%	0.0 - 100.0	UInteger	0.1%	FB00h-FFFFh
40245	65279	97	Water In Fuel	0	NA	0-3(Note 4*)	Binary 8	1	FB00h-FFFFh

Register	PGN #	SPN#	Description	Dec	Units	Range	Length	Scaling	Value for Error(Note 1*)
40301	61443	91	Accelerator Pedal Position 1	1	%	0.0 - 100.0	UInteger	0.1%	FB00h-FFFFh
40302	61443	92	Percent Load at Current Speed	0	%	0 - 250	UInteger	1%	FB00h-FFFFh
40303	61444	513	Actual Engine Per Cent Torque	0	%	-125 - 125	Integer	1%	7E00h-7FFFh
40304	61444	190	Engine Speed	0	rpm	0 - 8031	UInteger	1rpm	FB00h-FFFFh
40305									
40306	64966	626	Engine Start Enable Device 1	0		0-3 (Note 1*)	2bits	1	FE00h-FFFFh
40307	65164	1387	Auxiliary Pressure 1	0	PSI	0-580	UInteger	1PSI	FB00h-FFFFh
40308	65164	441	Auxiliary Temperature 1	0	°F	-40 - 410	Integer	1°F	7E00h-7FFFh
40309	65213	1639	Fan Speed	0	rpm	0-8031	UInteger	1rpm	FB00h-FFFFh
40310									
40311	65243	157	Injector Metering Rail 1 Pressure	0	PSI	0 - 36395	UInteger	1PSI	FB00h-FFFFh
40312	65243	1349	Injector Metering Rail 2 Pressure	0	PSI	0 - 36395	UInteger	1PSI	FB00h-FFFFh
40313	65243	164	Injection Control Pressure	0	PSI	0 - 36395	UInteger	1PSI	FB00h-FFFFh
40314	65253	247	Total Engine Hours (Least significant word)	2	hr	0.00-42110812.15	UInteger 32	0.01 HRS	FE000000h-FF000000
40315			Total Engine Hours (Mostsignificant word)						
40316	65257	250	Total Fuel Used (Least significant word)	1	Gallons	0.00 - 92643786.7	Uinterger 32	0.1Gallons/h	FE000000h-FF000000
40317			Total Fuel Used (Most significant word)						
40318	65257	182	Engine Trip Fuel (Least significant word)	1	Gallons	0.00 - 92643786.7	Uinterger 32	0.1Gallons/h	FE000000h-FF000000
40319			Engine Trip Fuel (Most significant word)						
40320	65262	110	Engine Coolant Temperature	0	°F	-40 - 410	Integer	1°F	7E00h-7FFFh
40321	65262	174	Fuel Temperature	0	°F	-40 - 410	Integer	1°F	7E00h-7FFFh
40322	65262	175	Engine Oil Temperature	0	°F	-459 - 3155	Integer	1°F	7E00h-7FFFh
40323	65262	52	Engine Intercooler Temperature	0	°F	-40 - 410	Integer	1°F	7E00h-7FFFh
40324	65263	94	Fuel Delivery Pressure	0	PSI	145	UInteger	1PSI	FB00h-FFFFh
40325	65263	98	Engine Oil Level	1	%	0.0 - 100.0	UInteger	0.1%	FB00h-FFFFh
40326	65263	100	Engine Oil Pressure	0	PSI	0-145	UInteger	1PSI	FB00h-FFFFh
40327	65263	101	Engine Crankcase Pressure	2	PSI	-36.25 - 36.53	UInteger	0.01PSI	7E00h-7FFFh
40328	65263	109	Coolant Pressure	1	PSI	0 - 72.5	UInteger	0.1Gallons/h	FB00h-FFFFh
40329	65263	111	Coolant Level	1	%	0.0 - 100.0	UInteger	0.1%	FB00h-FFFFh
40330	65266	183	Fuel Rate	1	Gallons/h	0.0 - 706.8	UInteger	0.1Gallons/h	FB00h-FFFFh
40331	65269	108	Barometric Pressure	3	PSI	0.0 - 18.125	UInteger	0.001PSI	FB00h-FFFFh
40332	65269	171	Ambient Air Temperature	0	°F	-459 - 3155	UInteger	1°F	7E00h-7FFFh
40333	65269	172	Air Inlet Temperature	0	°F	-40 - 410	UInteger	1°F	7E00h-7FFFh
40334	65270	102	Boost Pressure	1	PSI	0 - 72.5	UInteger	0.1PSI	FB00h-FFFFh
40335	65270	105	Intake Manifold Temperature	0	°F	-40 - 410	Integer	1°F	7E00h-7FFFh
40336	65270	107	Air Filter Differential Pressure	3	PSI	0.00 - 1.813	UInteger	0.001PSI	FB00h-FFFFh
40337	65270	173	Exhaust Gas Temperature	0	°F	-459 - 3155	Integer	1°F	7E00h-7FFFh
40338	65270	106	Engine Air Inlet Pressure	1	PSI	0 - 72.5	UInteger	0.1PSI	FB00h-FFFFh
40339	65271	168	Electric Potential	1	V	0.0 - 3212.7	UInteger	0. 1V	FB00h-FFFFh
40340	65271	158	Battery Potential Voltage (switched)	1	V	0.0 - 3212.7	UInteger	0.1V	FB00h-FFFFh
40341	65271	167	Charging System Potential	1	V	0.0 - 3212.7	UInteger	0.1V	FB00h-FFFFh
40342	65272	127	Transmission Oil Pressure	0	PSI	0 - 580	UInteger	1PSI	FB00h-FFFFh
40343	65272	177	Transmission Oil Temperature	0	°F	-450 - 3155	Integer	1°F	7E00h-7FFFh
40344	65276	96	Fuel Level	1	%	0.0 - 100.0	UInteger	0.1%	FB00h-FFFFh
40345	65279	97	Water In Fuel	0	NA	0-3(Note 1*)	Binary 8	1	FB00h-FFFFh

DM1 Registers

Register	PGN #	SPN#	Description	Dec	Units	Range	Length	Scaling	Value for Error(Note 1*)
40401			Number of Sets of Active Faults		NA	0-240	UInteger	1	
40402			Malfunction Indicator Lamp Status		NA	1 = On, 0 = Off	Binary 8	1	
40403			Red Stop Lamp Status		NA	1 = On, 0 = Off	Binary 8	1	
40404			Amber Stop Lamp Status		NA	1 = On, 0 = Off	Binary 8	1	
40405			Protect Lamp Status		NA	1 = On, 0 = Off	Binary 8	1	
40406			Active SPN 1 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40407			Active SPN 1 (Most significant word)						
40408			Active FMI 1		NA	0 - 31	UInteger	1	
40409			Active Occurrence Count 1		NA	0 - 127	UInteger	1	
40410			Active SPN 2 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40411			Active SPN 2 (Most significant word)						
40412			Active FMI 2		NA	0 - 31	UInteger	1	
40413			Active Occurrence Count 2		NA	0 - 127	UInteger	1	
40414			Active SPN 3 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40415			Active SPN 3 (Most significant word)						
40416			Active FMI 3		NA	0 - 31	UInteger	1	
40417			Active Occurrence Count 3		NA	0 - 127	UInteger	1	
40418			Active SPN 4 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40419			Active SPN 4 (Most significant word)						
40420			Active FMI 4		NA	0 - 31	UInteger	1	
40421			Active Occurrence Count 4		NA	0 - 127	UInteger	1	
40422			Active SPN 5 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40423			Active SPN 5 (Most significant word)					1	
40424			Active FMI 5		NA	0 - 31	UInteger	1	
40425			Active Occurrence Count 5		NA	0 - 127	UInteger	1	
40426			Active SPN 6 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40427			Active SPN 6 (Most significant word)						
40428			Active FMI 6		NA	0 - 31	UInteger	1	
40429			Active Occurrence Count 6		NA	0 - 127	UInteger	1	
40430			Active SPN 7 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40431			Active SPN 7 (Most significant word)					1	
40432			Active FMI 7		NA	0 - 31	UInteger		
40433			Active Occurrence Count 7		NA	0 - 127	UInteger	1	
40434			Active SPN 8 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40435			Active SPN 8 (Most significant word)						
40436			Active FMI 8		NA	0 - 31	UInteger	1	
40437			Active Occurrence Count 8		NA	0 - 127	UInteger	1	
40438			Active SPN 9 (Least significant word)		NA	1 - 524287	UInteger 32	1	
40439			Active SPN 9 (Most significant word)						
40440			Active FMI 9		NA	0 - 31	UInteger	1	
40441			Active Occurrence Count 9		NA	0 - 127	UInteger	1	
40442			Active SPN 10 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40443			Active SPN 10 (Most significant word)						
40444			Active FMI 10		NA	0 - 31	UInteger	1	
40445			Active Occurrence Count 10		NA	0 - 127	UInteger	1	

DM2 Registers

Register	PGN #	SPN#	Description	Dec	Units	Range	Length	Scaling	Value for Error(Note 1*)
40501			Number of Store Code		NA	0-240	UInteger	1	
40502			Malfunction Indicator Lamp Status		NA	1 = On, 0 = Off	Binary 8	1	
40503			Red Stop Lamp Status		NA	1 = On, 0 = Off	Binary 8	1	
40504			Amber Stop Lamp Status		NA	1 = On, 0 = Off	Binary 8	1	
40505			Protect Lamp Status		NA	1 = On, 0 = Off	Binary 8	1	
40506			Stored SPN 1 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40507			Stored SPN 1 (Most significant word)					1	
40508			Stored FMI 1		NA	0 - 31	UInteger	1	
40509			Stored Occurrence Count 1		NA	0 - 127	UInteger	1	
40510			Stored SPN 2 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40511			Stored SPN 2 (Most significant word)					1	
40512			Stored FMI 2		NA	0 - 31	UInteger	1	
40513			Stored Occurrence Count 2		NA	0 - 127	UInteger	1	
40514			Stored SPN 3 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40515			Stored SPN 3 (Most significant word)					1	
40516			Stored FMI 3		NA	0 - 31	UInteger	1	
40517			Stored Occurrence Count 3		NA	0 - 127	UInteger	1	
40518			Stored SPN 4 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40519			Stored SPN 4 (Most significant word)					1	
40520			Stored FMI 4		NA	0 - 31	UInteger	1	
40521			Stored Occurrence Count 4		NA	0 - 127	UInteger	1	
40522			Stored SPN 5 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40523			Stored SPN 5 (Most significant word)					1	
40524			Stored FMI 5		NA	0 - 31	UInteger	1	
40525			Stored Occurrence Count 5		NA	0 - 127	UInteger	1	
40526			Stored SPN 6 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40527			Stored SPN 6 (Most significant word)					1	
40528			Stored FMI 6		NA	0 - 31	UInteger	1	
40529			Stored Occurrence Count 6		NA	0 - 127	UInteger	1	
40530			Stored SPN 7 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40531			Stored SPN 7 (Most significant word)					1	
40532			Stored FMI 7		NA	0 - 31	UInteger	1	
40533			Stored Occurrence Count 7		NA	0 - 127	UInteger	1	
40534			Stored SPN 8 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40535			Stored SPN 8 (Most significant word)					1	
40536			Stored FMI 8		NA	0 - 31	UInteger	1	
40537			Stored Occurrence Count 8		NA	0 - 127	UInteger	1	
40538			Stored SPN 9 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40539			Stored SPN 9 (Most significant word)					1	
40540			Stored FMI 9		NA	0 - 31	UInteger	1	
40541			Stored Occurrence Count 9		NA	0 - 127	UInteger	1	
40542			Stored SPN 10 (Least significant word)		NA	0 - 524287	UInteger 32	1	
40543			Stored SPN 10 (Most significant word)					1	
40544			Stored FMI 10		NA	0 - 31	UInteger	1	
40545			Stored Occurrence Count 10		NA	0 - 127	UInteger	1	

Note

1* Uinteger :FEFEh = timeout ;FF00h= not available

Integer : 7EFEh = timeout ;7F00h= not available

UInteger 32 :FEFFFFFFEh = timeout ;FF000000h= not available

2* 0 = 1200bps; 1=2400bps; 2= 4800bps; 3 = 9600bps; 4 = 19200bps; 5 = 38460bps

3* 0 = 125kBaud; 1 = 250kBaud; 2 = 500kBaud; 3 = 100kBaud

4* 0 = Off, 1 = On, 2 = reserved, 3=not available