

Final Interoperability Test Report

FIT #: **91**
 Date: 8/30/2022
 Location: DNV-GL,Arnhem, Netherlands
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APPLICANT

Company: Smart Metering Solutions (Changsha) Co., Ltd.

Address: No.468 West Tongzipo Road High-Tech Industrial Development Zone, Changsha City, Hunan Province, China

DEVICE		
Device type	IM351	
<i>Type indication on MID certificate</i>		<i>MID Certificate No.</i>
IM351		0120/SGS0501
<i>IDIS Specification reference</i>	<i>DNV-gl IDIS Certification run No</i>	<i>Digital signature of the test report.</i>
Package 2 ed. 2.0	1924	59AA53FD60950299A51552A663C5CEE7
<i>First certification</i>	<i>IDIS Label</i>	<i>Modular device</i>
<input type="checkbox"/>	0091	<input type="checkbox"/>
<i>General information about the device</i>		
Polyphase Smart Meter		

FIRMWARE VERSIONS TESTED				<i>Final Interoperability Test No. 91</i>
Firmware No.	Firmware ID1	Firmware ID2	Firmware ID3	Verdict
1	WSE351EL0401001 0			Passed

Honeywell

Iskraemeco d.d.

Itron

Landis+Gyr AG

Fit #91

Device:SMSC IM351

DNV-GL,Arnhem, Netherlands, 30.08.2022

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FIRMWARE VERSIONS HISTORY				Final Integration Test	
Firmware No.	Firmware ID1	Firmware ID2	Firmware ID3	No.	Verdict
1	WSE351EL0401001 0			91	Passed

TEST REPORT - Firmware No. 1		
Test	Verdict	Remark
Connect and release	Passed	
All Device IDs	Passed	
COSEM logical device name	Passed	
SAP assignment	Passed	
FW version and signature	Passed	Only one FW in use
All Device ID's	Passed	
Broadcast Date and time	Passed	
Broadcast Special Days Table	Passed	
Event logs	Passed	
Billing data period 1	Passed	
M-Bus Channel Setup	Passed	Master Setup N/A
M-Bus Results	Passed	
M-Bus Devices IDs	Passed	
M-Bus profiles	Passed	
M-Bus Load profiles	Passed	
M-Bus control logs	Passed	
M-Bus Disconnect log	Passed	
FIT Push	Passed	Power Off Push N/A
FIT Miscellaneous	Passed	
Optical Port Connectivity	Passed	
Consumer Information Interface	Passed	
FIT Conformance Test Report		
<pre> ***** IDIS Conformance test report 30-AUG-2022 13:21:34 iCTT2 Package 2, Edition 2.0, Revision 1 (136) Licensed to: KEMA-IDIS Cert. Tester: Tom Levels ***** ***** * Identification * ***** Manufacturer = { Name = '\Smart Metering Solutions (Changsha) Co., Ltd.' ThreeLettersId = '\SMS' } DeviceUnderTest = { Type = '\IM351' IDISDeviceType = 103 IDISFunctionType = [EXTENSION_D, EXTENSION_L, EXTENSION_M] SerialNr = 3684408 IPVersion = IPV6 DataLinkLayer = G3 ConsumerInformationPush = FALSE EUI64Address = '386E21FFFE383838' SMSSupported = FALSE ClipCallSupported = FALSE } Active firmware identifier (1-0:0.2.0.255) = \WSE351EL04010010 ***** * Summary * ***** PASSED 262 FAILED 0 DISABLED 0 INAPPLICABLE 11 INCONCLUSIVE 0 </pre>		

FATAL	0	
TOTAL	273	

Test Case 1 : Connect and release, 4 item(s)		

(1) Connect Public		PASSED
(2) Release Public		PASSED
(3) Connect Management		PASSED
(4) Release Management		PASSED

Test Case 2 : Read Device IDs, 12 item(s)		

Mngmt Get Device ID 1, manufacturing number 0-0:96.1.0.255 (@46)		
(1) .logical_name		PASSED
<Data>		
<OctetString Value="0000600100FF" />		
</Data>		
(2) .value		PASSED
<Data>		
<OctetString Value="\2021000000000016" />		
</Data>		
Mngmt Get Device ID 2 0-0:96.1.1.255 (@50)		
(3) .logical_name		PASSED
<Data>		
<OctetString Value="0000600101FF" />		
</Data>		
(4) .value		PASSED
<Data>		
<OctetString Value="\2021" />		
</Data>		
Mngmt Get Device ID 3 0-0:96.1.2.255 (@54)		
(5) .logical_name		PASSED
<Data>		
<OctetString Value="0000600102FF" />		
</Data>		
(6) .value		PASSED
<Data>		
<OctetString Value="\OPT-OUT" />		
</Data>		
Mngmt Get Device ID 4 0-0:96.1.3.255 (@58)		
(7) .logical_name		PASSED
<Data>		
<OctetString Value="0000600103FF" />		
</Data>		
(8) .value		PASSED
<Data>		
<OctetString Value="\2021" />		
</Data>		
Mngmt Get Device ID 5 0-0:96.1.4.255 (@62)		
(9) .logical_name		PASSED
<Data>		
<OctetString Value="0000600104FF" />		
</Data>		
(10) .value		PASSED
<Data>		
<OctetString Value="\2021" />		
</Data>		
Mngmt Get Device ID 6, IDIS certification number 0-0:96.1.5.255 (@66)		
(11) .logical_name		PASSED
<Data>		
<OctetString Value="0000600105FF" />		
</Data>		
(12) .value		PASSED
<Data>		
<OctetString Value="\2021000000000000" />		

```

</Data>

*****
Test Case 3 : Read COSEM Logical Device Name, 2 item(s)
*****

Mngmt Get COSEM logical device name 0-0:42.0.0.255 (@42)
(1) .logical_name PASSED
    <Data>
    <OctetString Value="00002A0000FF" />
    </Data>
(2) .value PASSED
    <Data>
    <OctetString Value="\SMS1030703684408" />
    </Data>

*****
Test Case 4 : Read SAP Assignment, 2 item(s)
*****

Mngmt Get SAP Assignment 0-0:41.0.0.255 (@4)
(1) .logical_name PASSED
    <Data>
    <OctetString Value="0000290000FF" />
    </Data>
(2) .SAP_assignment_list PASSED
    <Data>
    <Array Qty="0001" >
    <Structure Qty="0002" >
    <LongUnsigned Value="0001" />
    <OctetString Value="\SMS1030703684408" />
    </Structure>
    </Array>
    </Data>

*****
Test Case 5 : Read Active FW Version, 12 item(s)
*****

Mngmt Get Active firmware identifier 1-0:0.2.0.255 (@412)
(1) .logical_name PASSED
    <Data>
    <OctetString Value="0100000200FF" />
    </Data>
(2) .value PASSED
    <Data>
    <OctetString Value="\WSE351EL04010010" />
    </Data>

Mngmt Get Active firmware signature 1-0:0.2.8.255 (@416)
(3) .logical_name PASSED
    <Data>
    <OctetString Value="0100000208FF" />
    </Data>
(4) .value PASSED
    <Data>
    <OctetString
Value="087CEEB89EACC5FCBD0B618FF82BC3AC75EFDDEF32E53E2D53B42BA9B6B83ECA062426322487EBD347B2AD
E64A14A9871B5F0BA09C35BE624631F0F39E5BBA8F" />
    </Data>

Mngmt Get Active firmware identifier 1 1-1:0.2.0.255 (@420)
(5) .logical_name
INAPPLICABLE
    Optional object is not implemented
(6) .value
INAPPLICABLE
    Optional object is not implemented

Mngmt Get Active firmware signature 1 1-1:0.2.8.255 (@424)
(7) .logical_name
INAPPLICABLE
    Optional object is not implemented

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(8) .value
INAPPLICABLE
    Optional object is not implemented

Mngmt Get Active firmware identifier 2 1-2:0.2.0.255 (@428)
(9) .logical_name
INAPPLICABLE
    Optional object is not implemented
(10) .value
INAPPLICABLE
    Optional object is not implemented

Mngmt Get Active firmware signature 2 1-2:0.2.8.255 (@432)
(11) .logical_name
INAPPLICABLE
    Optional object is not implemented
(12) .value
INAPPLICABLE
    Optional object is not implemented

*****
Test Case 6 : Set Clock, 1 item(s)
*****

Pre Set Clock 0-0:1.0.0.255 (@75)
(1) .time                                     PASSED
    <Data>
        <OctetString Value="07E6081EFF10000FF8000FF" />
    </Data>

*****
Test Case 7 : Get Clock, 1 item(s)
*****

Mngmt Get Clock 0-0:1.0.0.255 (@75)
(1) .time                                     PASSED
    <Data>
        <OctetString Value="07E6081E0210000200FF8880" />
    </Data>

*****
Test Case 8 : Set Special Days, 1 item(s)
*****

Pre Set Special Days Table 0-0:11.0.0.255 (@125)
(1) .entries                                  PASSED
    <Data>
        <Array Qty="001E" >
            <Structure Qty="0003" >
                <LongUnsigned Value="0001" />
                <OctetString Value="FFFF0101FF" />
                <Unsigned Value="02" />
            </Structure>
            <Structure Qty="0003" >
                <LongUnsigned Value="0002" />
                <OctetString Value="FFFF0102FF" />
                <Unsigned Value="02" />
            </Structure>
            <Structure Qty="0003" >
                <LongUnsigned Value="0003" />
                <OctetString Value="FFFF0103FF" />
                <Unsigned Value="02" />
            </Structure>
            <Structure Qty="0003" >
                <LongUnsigned Value="0004" />
                <OctetString Value="FFFF0104FF" />
                <Unsigned Value="02" />
            </Structure>
            <Structure Qty="0003" >
                <LongUnsigned Value="0005" />
                <OctetString Value="FFFF0105FF" />
                <Unsigned Value="02" />
            </Structure>
        </Array>
    </Data>

```

```

<Structure Qty="0003" >
  <LongUnsigned Value="0006" />
  <OctetString Value="FFFF0106FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0007" />
  <OctetString Value="FFFF0107FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0008" />
  <OctetString Value="FFFF0108FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0009" />
  <OctetString Value="FFFF0109FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="000A" />
  <OctetString Value="FFFF010AFF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="000B" />
  <OctetString Value="FFFF0201FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="000C" />
  <OctetString Value="FFFF0202FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="000D" />
  <OctetString Value="FFFF0203FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="000E" />
  <OctetString Value="FFFF0204FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="000F" />
  <OctetString Value="FFFF0205FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0010" />
  <OctetString Value="FFFF0206FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0011" />
  <OctetString Value="FFFF0207FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0012" />
  <OctetString Value="FFFF0208FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0013" />
  <OctetString Value="FFFF0209FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0014" />
  <OctetString Value="FFFF020AFF" />

```

```

    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="0015" />
    <OctetString Value="FFFF0301FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="0016" />
    <OctetString Value="FFFF0302FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="0017" />
    <OctetString Value="FFFF0303FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="0018" />
    <OctetString Value="FFFF0304FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="0019" />
    <OctetString Value="FFFF0305FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="001A" />
    <OctetString Value="FFFF0306FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="001B" />
    <OctetString Value="FFFF0307FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="001C" />
    <OctetString Value="FFFF0308FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="001D" />
    <OctetString Value="FFFF0309FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="001E" />
    <OctetString Value="FFFF030AFF" />
    <Unsigned Value="02" />
  </Structure>
</Array>
</Data>

```

```

*****
Test Case 9 : Get Special Days, 1 item(s)
*****

```

Mngmt Get Special Days Table 0-0:11.0.0.255 (@125)

(1) .entries

PASSED

```

  <Data>
    <Array Qty="001E" >
      <Structure Qty="0003" >
        <LongUnsigned Value="0001" />
        <OctetString Value="FFFF0101FF" />
        <Unsigned Value="02" />
      </Structure>
      <Structure Qty="0003" >
        <LongUnsigned Value="0002" />
        <OctetString Value="FFFF0102FF" />
        <Unsigned Value="02" />
      </Structure>

```



```

<Structure Qty="0003" >
  <LongUnsigned Value="0003" />
  <OctetString Value="FFFF0103FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0004" />
  <OctetString Value="FFFF0104FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0005" />
  <OctetString Value="FFFF0105FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0006" />
  <OctetString Value="FFFF0106FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0007" />
  <OctetString Value="FFFF0107FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0008" />
  <OctetString Value="FFFF0108FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0009" />
  <OctetString Value="FFFF0109FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="000A" />
  <OctetString Value="FFFF010AFF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="000B" />
  <OctetString Value="FFFF0201FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="000C" />
  <OctetString Value="FFFF0202FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="000D" />
  <OctetString Value="FFFF0203FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="000E" />
  <OctetString Value="FFFF0204FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="000F" />
  <OctetString Value="FFFF0205FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0010" />
  <OctetString Value="FFFF0206FF" />
  <Unsigned Value="02" />
</Structure>
<Structure Qty="0003" >
  <LongUnsigned Value="0011" />
  <OctetString Value="FFFF0207FF" />

```

```

    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="0012" />
    <OctetString Value="FFFF0208FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="0013" />
    <OctetString Value="FFFF0209FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="0014" />
    <OctetString Value="FFFF020AFF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="0015" />
    <OctetString Value="FFFF0301FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="0016" />
    <OctetString Value="FFFF0302FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="0017" />
    <OctetString Value="FFFF0303FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="0018" />
    <OctetString Value="FFFF0304FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="0019" />
    <OctetString Value="FFFF0305FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="001A" />
    <OctetString Value="FFFF0306FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="001B" />
    <OctetString Value="FFFF0307FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="001C" />
    <OctetString Value="FFFF0308FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="001D" />
    <OctetString Value="FFFF0309FF" />
    <Unsigned Value="02" />
  </Structure>
  <Structure Qty="0003" >
    <LongUnsigned Value="001E" />
    <OctetString Value="FFFF030AFF" />
    <Unsigned Value="02" />
  </Structure>
</Array>
</Data>

```

```

*****
Test Case 10 : Read Event Log Buffers, 20 item(s)
*****

```

```

Mngmt Get Disconnecter Control Log 0-0:99.98.2.255 (@193)
(1) .logical_name PASSED
    <Data>
      <OctetString Value="0000636202FF" />
    </Data>
(2) .buffer PASSED
    Earliest date: 10-NOV-2021 11:46:01, latest date: 14-NOV-2021 19:46:01
    Middle date: 12-NOV-2021 15:46:01
(3) .entries_in_use PASSED
    <Data>
      <DoubleLongUnsigned Value="00000005" />
    </Data>
(4) .profile_entries PASSED
    <Data>
      <DoubleLongUnsigned Value="000000C8" />
    </Data>

Mngmt Get Standard Event Log 0-0:99.98.0.255 (@301)
(5) .logical_name PASSED
    <Data>
      <OctetString Value="0000636200FF" />
    </Data>
(6) .buffer PASSED
    Earliest date: 01-FEB-2022 11:00:17, latest date: 30-AUG-2022 16:06:20
    Middle date: 30-AUG-2022 12:24:26
(7) .entries_in_use PASSED
    <Data>
      <DoubleLongUnsigned Value="00000024" />
    </Data>
(8) .profile_entries PASSED
    <Data>
      <DoubleLongUnsigned Value="000001F4" />
    </Data>

Mngmt Get Fraud Detection Log 0-0:99.98.1.255 (@316)
(9) .logical_name PASSED
    <Data>
      <OctetString Value="0000636201FF" />
    </Data>
(10) .buffer PASSED
    Earliest date: 10-NOV-2021 11:46:01, latest date: 30-AUG-2022 13:02:50
    Middle date: 13-NOV-2021 17:46:01
(11) .entries_in_use PASSED
    <Data>
      <DoubleLongUnsigned Value="00000007" />
    </Data>
(12) .profile_entries PASSED
    <Data>
      <DoubleLongUnsigned Value="000000C8" />
    </Data>

Mngmt Get Communication Log 0-0:99.98.5.255 (@331)
(13) .logical_name PASSED
    <Data>
      <OctetString Value="0000636205FF" />
    </Data>
(14) .buffer PASSED
    Earliest date: 10-NOV-2021 11:46:01, latest date: 30-AUG-2022 16:01:15
    Middle date: 14-NOV-2021 19:46:01
(15) .entries_in_use PASSED
    <Data>
      <DoubleLongUnsigned Value="00000008" />
    </Data>
(16) .profile_entries PASSED
    <Data>
      <DoubleLongUnsigned Value="000000C8" />
    </Data>

Mngmt Get Power Quality Log 0-0:99.98.4.255 (@1340)
(17) .logical_name PASSED
    <Data>
      <OctetString Value="0000636204FF" />

```

</Data>		
(18)	.buffer Earliest date: 10-NOV-2021 11:46:01, latest date: 30-AUG-2022 13:12:57 Middle date: 30-AUG-2022 12:35:23	PASSED
(19)	.entries_in_use <Data> <DoubleLongUnsigned Value="0000000D" /> </Data>	PASSED
(20)	.profile_entries <Data> <DoubleLongUnsigned Value="000000C8" /> </Data>	PASSED
***** Test Case 11 : Reading Data of Billing Period 1, 8 item(s) *****		
Mngmt Get Data of billing period 1 0-0:98.1.0.255 (@158)		
(1)	.logical_name <Data> <OctetString Value="0000620100FF" /> </Data>	PASSED
(2)	.buffer Earliest date: 02-FEB-2022 00:00:00, latest date: 30-AUG-2022 12:41:59 Middle date: 02-JUN-2022 00:00:00	PASSED
(3)	.capture_objects <Data> <Array Qty="0003" > <Structure Qty="0004" > <LongUnsigned Value="0008" /> <OctetString Value="0000010000FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> <Structure Qty="0004" > <LongUnsigned Value="0003" /> <OctetString Value="0100010801FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> <Structure Qty="0004" > <LongUnsigned Value="0003" /> <OctetString Value="0100010802FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> </Array> </Data>	PASSED
(4)	.capture_period <Data> <DoubleLongUnsigned Value="00000000" /> </Data>	PASSED
(5)	.sort_method <Data> <Enum Value="01" /> </Data>	PASSED
(6)	.sort_object <Data> <Structure Qty="0004" > <LongUnsigned Value="0008" /> <OctetString Value="0000010000FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> </Data>	PASSED
(7)	.entries_in_use <Data> <DoubleLongUnsigned Value="00000009" /> </Data>	PASSED
(8)	.profile_entries <Data> <DoubleLongUnsigned Value="000000C8" /> </Data>	PASSED

```

*****
Test Case 12 : Ext. M - M-Bus Setup LGZ G350, 52 item(s)
*****

Mngmt Get M-Bus master port setup 1 0-0:24.6.0.255 (@1566)
(1) .logical_name                                     PASSED
    <Data>
        <OctetString Value="0000180600FF" />
    </Data>
(2) .comm_speed                                       PASSED
    <Data>
        <Enum Value="03" />
    </Data>

Mngmt Get M-Bus master port setup 2 0-1:24.6.0.255 (@1570)
(3) .logical_name
INAPPLICABLE
    Optional object is not implemented
(4) .comm_speed
INAPPLICABLE
    Optional object is not implemented

Mngmt Get M-Bus client channel 1 0-1:24.1.0.255 (@1574)
(5) .logical_name                                     PASSED
    <Data>
        <OctetString Value="0001180100FF" />
    </Data>
(6) .mbus_port_reference                             PASSED
    <Data>
        <OctetString Value="0000180600FF" />
    </Data>
(7) .capture_definition                             PASSED
    <Data>
        <Array Qty="0004" >
            <Structure Qty="0002" >
                <OctetString Value="\L" />
                <OctetString Value="933A" />
            </Structure>
            <Structure Qty="0002" >
                <OctetString Value="8940" />
                <OctetString Value="FD1A" />
            </Structure>
            <Structure Qty="0002" >
                <OctetString Value="" />
                <OctetString Value="" />
            </Structure>
            <Structure Qty="0002" >
                <OctetString Value="" />
                <OctetString Value="" />
            </Structure>
        </Array>
    </Data>
(8) .capture_period                                  PASSED
    <Data>
        <DoubleLongUnsigned Value="00000E10" />
    </Data>
(9) .primary_address                                 PASSED
    <Data>
        <Unsigned Value="01" />
    </Data>
(10) .identification_number                         PASSED
    <Data>
        <DoubleLongUnsigned Value="00047BB1" />
    </Data>
(11) .manufacturer_id                               PASSED
    <Data>
        <LongUnsigned Value="19AC" />
    </Data>
(12) .version                                        PASSED
    <Data>
        <Unsigned Value="02" />
    </Data>

```

(13)	.device_type	PASSED
	<Data>	
	<Unsigned Value="03" />	
	</Data>	
(14)	.access_number	PASSED
	<Data>	
	<Unsigned Value="7B" />	
	</Data>	
(15)	.status	PASSED
	<Data>	
	<Unsigned Value="04" />	
	</Data>	
(16)	.alarm	PASSED
	<Data>	
	<Unsigned Value="00" />	
	</Data>	
Mngmt Get M-Bus client channel 2 0-2:24.1.0.255 (@1596)		
(17)	.logical_name	PASSED
	<Data>	
	<OctetString Value="0002180100FF" />	
	</Data>	
(18)	.mbus_port_reference	PASSED
	<Data>	
	<OctetString Value="0000180600FF" />	
	</Data>	
(19)	.capture_definition	PASSED
	<Data>	
	<Array Qty="0004" >	
	<Structure Qty="0002" >	
	<OctetString Value="\L" />	
	<OctetString Value="933A" />	
	</Structure>	
	<Structure Qty="0002" >	
	<OctetString Value="8940" />	
	<OctetString Value="FD1A" />	
	</Structure>	
	<Structure Qty="0002" >	
	<OctetString Value="" />	
	<OctetString Value="" />	
	</Structure>	
	<Structure Qty="0002" >	
	<OctetString Value="" />	
	<OctetString Value="" />	
	</Structure>	
	</Array>	
	</Data>	
(20)	.capture_period	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00000E10" />	
	</Data>	
(21)	.primary_address	PASSED
	<Data>	
	<Unsigned Value="02" />	
	</Data>	
(22)	.identification_number	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00047BB2" />	
	</Data>	
(23)	.manufacturer_id	PASSED
	<Data>	
	<LongUnsigned Value="19AC" />	
	</Data>	
(24)	.version	PASSED
	<Data>	
	<Unsigned Value="02" />	
	</Data>	
(25)	.device_type	PASSED
	<Data>	
	<Unsigned Value="03" />	
	</Data>	
(26)	.access_number	PASSED
	<Data>	

	<Unsigned Value="00" />	
	</Data>	
(27)	.status	PASSED
	<Data>	
	<Unsigned Value="00" />	
	</Data>	
(28)	.alarm	PASSED
	<Data>	
	<Unsigned Value="00" />	
	</Data>	
Mngmt Get M-Bus client channel 3 0-3:24.1.0.255 (@1618)		
(29)	.logical_name	PASSED
	<Data>	
	<OctetString Value="0003180100FF" />	
	</Data>	
(30)	.mbus_port_reference	PASSED
	<Data>	
	<OctetString Value="0000180600FF" />	
	</Data>	
(31)	.capture_definition	PASSED
	<Data>	
	<Array Qty="0004" >	
	<Structure Qty="0002" >	
	<OctetString Value="\L" />	
	<OctetString Value="933A" />	
	</Structure>	
	<Structure Qty="0002" >	
	<OctetString Value="8940" />	
	<OctetString Value="FD1A" />	
	</Structure>	
	<Structure Qty="0002" >	
	<OctetString Value="" />	
	<OctetString Value="" />	
	</Structure>	
	<Structure Qty="0002" >	
	<OctetString Value="" />	
	<OctetString Value="" />	
	</Structure>	
	</Array>	
	</Data>	
(32)	.capture_period	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00000E10" />	
	</Data>	
(33)	.primary_address	PASSED
	<Data>	
	<Unsigned Value="03" />	
	</Data>	
(34)	.identification_number	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00047BB4" />	
	</Data>	
(35)	.manufacturer_id	PASSED
	<Data>	
	<LongUnsigned Value="19AC" />	
	</Data>	
(36)	.version	PASSED
	<Data>	
	<Unsigned Value="02" />	
	</Data>	
(37)	.device_type	PASSED
	<Data>	
	<Unsigned Value="03" />	
	</Data>	
(38)	.access_number	PASSED
	<Data>	
	<Unsigned Value="00" />	
	</Data>	
(39)	.status	PASSED
	<Data>	
	<Unsigned Value="00" />	
	</Data>	

(40)	.alarm	PASSED
	<Data>	
	<Unsigned Value="00" />	
	</Data>	
Mngmt Get M-Bus client channel 4 0-4:24.1.0.255 (@1640)		
(41)	.logical_name	PASSED
	<Data>	
	<OctetString Value="0004180100FF" />	
	</Data>	
(42)	.mbus_port_reference	PASSED
	<Data>	
	<OctetString Value="0000180600FF" />	
	</Data>	
(43)	.capture_definition	PASSED
	<Data>	
	<Array Qty="0004" >	
	<Structure Qty="0002" >	
	<OctetString Value="\L" />	
	<OctetString Value="933A" />	
	</Structure>	
	<Structure Qty="0002" >	
	<OctetString Value="8940" />	
	<OctetString Value="FD1A" />	
	</Structure>	
	<Structure Qty="0002" >	
	<OctetString Value="" />	
	<OctetString Value="" />	
	</Structure>	
	<Structure Qty="0002" >	
	<OctetString Value="" />	
	<OctetString Value="" />	
	</Structure>	
	</Array>	
	</Data>	
(44)	.capture_period	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00000E10" />	
	</Data>	
(45)	.primary_address	PASSED
	<Data>	
	<Unsigned Value="04" />	
	</Data>	
(46)	.identification_number	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00047BB3" />	
	</Data>	
(47)	.manufacturer_id	PASSED
	<Data>	
	<LongUnsigned Value="19AC" />	
	</Data>	
(48)	.version	PASSED
	<Data>	
	<Unsigned Value="02" />	
	</Data>	
(49)	.device_type	PASSED
	<Data>	
	<Unsigned Value="03" />	
	</Data>	
(50)	.access_number	PASSED
	<Data>	
	<Unsigned Value="00" />	
	</Data>	
(51)	.status	PASSED
	<Data>	
	<Unsigned Value="00" />	
	</Data>	
(52)	.alarm	PASSED
	<Data>	
	<Unsigned Value="00" />	
	</Data>	

Test Case 13 : Ext. M - M-Bus Results uncorrected Vol. & valve, 40 item(s)

```

Mngmt Get M-Bus Value channel 1, instance 1 0-1:24.2.1.255 (@1662)
(1) .logical_name PASSED
    <Data>
    <OctetString Value="0001180201FF" />
    </Data>
(2) .value PASSED
    <Data>
    <DoubleLongUnsigned Value="00000F93" />
    </Data>
(3) .scaler_unit PASSED
    <Data>
    <Structure Qty="0002" >
    <Integer Value="FD" />
    <Enum Value="0D" />
    </Structure>
    </Data>
(4) .status PASSED
    <Data>
    <Unsigned Value="04" />
    </Data>
(5) .capture_time PASSED
    <Data>
    <OctetString Value="07E6081E020D0D1B00FF8880" />
    </Data>

Mngmt Get M-Bus Value channel 1, instance 2 0-1:24.2.2.255 (@1670)
(6) .logical_name PASSED
    <Data>
    <OctetString Value="0001180202FF" />
    </Data>
(7) .value PASSED
    <Data>
    <DoubleLongUnsigned Value="00000001" />
    </Data>
(8) .scaler_unit PASSED
    <Data>
    <Structure Qty="0002" >
    <Integer Value="00" />
    <Enum Value="FF" />
    </Structure>
    </Data>
(9) .status PASSED
    <Data>
    <Unsigned Value="04" />
    </Data>
(10) .capture_time PASSED
    <Data>
    <OctetString Value="07E6081E020D0D1B00FF8880" />
    </Data>

Mngmt Get M-Bus Value channel 2, instance 1 0-2:24.2.1.255 (@1694)
(11) .logical_name PASSED
    <Data>
    <OctetString Value="0002180201FF" />
    </Data>
(12) .value PASSED
    <Data>
    <DoubleLongUnsigned Value="00000B73" />
    </Data>
(13) .scaler_unit PASSED
    <Data>
    <Structure Qty="0002" >
    <Integer Value="FD" />
    <Enum Value="0D" />
    </Structure>
    </Data>
(14) .status PASSED
    <Data>
    <Unsigned Value="04" />
    </Data>
  
```

(15)	.capture_time	PASSED
	<Data>	
	<OctetString Value="07E6081E020C0D0E00FF8880" />	
	</Data>	
	Mngmt Get M-Bus Value channel 2, instance 2 0-2:24.2.2.255 (@1702)	
(16)	.logical_name	PASSED
	<Data>	
	<OctetString Value="0002180202FF" />	
	</Data>	
(17)	.value	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00000001" />	
	</Data>	
(18)	.scaler_unit	PASSED
	<Data>	
	<Structure Qty="0002" >	
	<Integer Value="00" />	
	<Enum Value="FF" />	
	</Structure>	
	</Data>	
(19)	.status	PASSED
	<Data>	
	<Unsigned Value="04" />	
	</Data>	
(20)	.capture_time	PASSED
	<Data>	
	<OctetString Value="07E6081E020C0D0E00FF8880" />	
	</Data>	
	Mngmt Get M-Bus Value channel 3, instance 1 0-3:24.2.1.255 (@1726)	
(21)	.logical_name	PASSED
	<Data>	
	<OctetString Value="0003180201FF" />	
	</Data>	
(22)	.value	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00000E64" />	
	</Data>	
(23)	.scaler_unit	PASSED
	<Data>	
	<Structure Qty="0002" >	
	<Integer Value="FD" />	
	<Enum Value="0D" />	
	</Structure>	
	</Data>	
(24)	.status	PASSED
	<Data>	
	<Unsigned Value="04" />	
	</Data>	
(25)	.capture_time	PASSED
	<Data>	
	<OctetString Value="07E6081E020C0E2900FF8880" />	
	</Data>	
	Mngmt Get M-Bus Value channel 3, instance 2 0-3:24.2.2.255 (@1734)	
(26)	.logical_name	PASSED
	<Data>	
	<OctetString Value="0003180202FF" />	
	</Data>	
(27)	.value	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00000001" />	
	</Data>	
(28)	.scaler_unit	PASSED
	<Data>	
	<Structure Qty="0002" >	
	<Integer Value="00" />	
	<Enum Value="FF" />	
	</Structure>	
	</Data>	
(29)	.status	PASSED
	<Data>	

	<Unsigned Value="04" />	
	</Data>	
(30)	.capture_time	PASSED
	<Data>	
	<OctetString Value="07E6081E020C0E2900FF8880" />	
	</Data>	
	Mngmt Get M-Bus Value channel 4, instance 1 0-4:24.2.1.255 (@1758)	
(31)	.logical_name	PASSED
	<Data>	
	<OctetString Value="0004180201FF" />	
	</Data>	
(32)	.value	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00000AAB" />	
	</Data>	
(33)	.scaler_unit	PASSED
	<Data>	
	<Structure Qty="0002" >	
	<Integer Value="FD" />	
	<Enum Value="0D" />	
	</Structure>	
	</Data>	
(34)	.status	PASSED
	<Data>	
	<Unsigned Value="04" />	
	</Data>	
(35)	.capture_time	PASSED
	<Data>	
	<OctetString Value="07E6081E020C0F2800FF8880" />	
	</Data>	
	Mngmt Get M-Bus Value channel 4, instance 2 0-4:24.2.2.255 (@1766)	
(36)	.logical_name	PASSED
	<Data>	
	<OctetString Value="0004180202FF" />	
	</Data>	
(37)	.value	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00000001" />	
	</Data>	
(38)	.scaler_unit	PASSED
	<Data>	
	<Structure Qty="0002" >	
	<Integer Value="00" />	
	<Enum Value="FF" />	
	</Structure>	
	</Data>	
(39)	.status	PASSED
	<Data>	
	<Unsigned Value="04" />	
	</Data>	
(40)	.capture_time	PASSED
	<Data>	
	<OctetString Value="07E6081E020C0F2800FF8880" />	
	</Data>	

Test Case 14 : Ext. M - M-Bus Device IDs, 16 item(s)		

	Mngmt Get M-Bus Device ID 1 channel 1 0-1:96.1.0.255 (@1790)	
(1)	.logical_name	PASSED
	<Data>	
	<OctetString Value="0001600100FF" />	
	</Data>	
(2)	.value	PASSED
	<Data>	
	<OctetString Value="3239333830390000" />	
	</Data>	
	Mngmt Get M-Bus Device ID 1 channel 2 0-2:96.1.0.255 (@1794)	
(3)	.logical_name	PASSED

```

    <Data>
      <OctetString Value="0002600100FF" />
    </Data>
(4) .value PASSED
    <Data>
      <OctetString Value="3239333831300000" />
    </Data>

Mngmt Get M-Bus Device ID 1 channel 3 0-3:96.1.0.255 (@1798)
(5) .logical_name PASSED
    <Data>
      <OctetString Value="0003600100FF" />
    </Data>
(6) .value PASSED
    <Data>
      <OctetString Value="3239333831320000" />
    </Data>

Mngmt Get M-Bus Device ID 1 channel 4 0-4:96.1.0.255 (@1802)
(7) .logical_name PASSED
    <Data>
      <OctetString Value="0004600100FF" />
    </Data>
(8) .value PASSED
    <Data>
      <OctetString Value="3239333831310000" />
    </Data>

Mngmt Get M-Bus Device ID 2 channel 1 0-1:96.1.1.255 (@1806)
(9) .logical_name PASSED
    <Data>
      <OctetString Value="0001600101FF" />
    </Data>
(10) .value PASSED
    <Data>
      <OctetString Value="\2021" />
    </Data>

Mngmt Get M-Bus Device ID 2 channel 2 0-2:96.1.1.255 (@1810)
(11) .logical_name PASSED
    <Data>
      <OctetString Value="0002600101FF" />
    </Data>
(12) .value PASSED
    <Data>
      <OctetString Value="\2021" />
    </Data>

Mngmt Get M-Bus Device ID 2 channel 3 0-3:96.1.1.255 (@1814)
(13) .logical_name PASSED
    <Data>
      <OctetString Value="0003600101FF" />
    </Data>
(14) .value PASSED
    <Data>
      <OctetString Value="\2021" />
    </Data>

Mngmt Get M-Bus Device ID 2 channel 4 0-4:96.1.1.255 (@1818)
(15) .logical_name PASSED
    <Data>
      <OctetString Value="0004600101FF" />
    </Data>
(16) .value PASSED
    <Data>
      <OctetString Value="\2021" />
    </Data>

*****
Test Case 15 : Ext. M - M-Bus Load Profiles, 32 item(s)
*****

Mngmt Get M-Bus Master Load profile for channel 1 0-1:24.3.0.255 (@1838)

```

(1) .logical_name	PASSED
<pre> <Data> <OctetString Value="0001180300FF" /> </Data> </pre>	
(2) .buffer	PASSED
<pre> Earliest date: 01-FEB-2022 12:00:00, latest date: 30-AUG-2022 17:00:00 Middle date: 02-JUN-2022 01:00:00 </pre>	
(3) .capture_objects	PASSED
<pre> <Data> <Array Qty="0006" > <Structure Qty="0004" > <LongUnsigned Value="0008" /> <OctetString Value="0000010000FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> <Structure Qty="0004" > <LongUnsigned Value="0001" /> <OctetString Value="0001600A03FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> <Structure Qty="0004" > <LongUnsigned Value="0004" /> <OctetString Value="0001180201FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> <Structure Qty="0004" > <LongUnsigned Value="0004" /> <OctetString Value="0001180202FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> <Structure Qty="0004" > <LongUnsigned Value="0004" /> <OctetString Value="0001180203FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> <Structure Qty="0004" > <LongUnsigned Value="0004" /> <OctetString Value="0001180204FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> </Array> </Data> </pre>	
(4) .capture_period	PASSED
<pre> <Data> <DoubleLongUnsigned Value="00000E10" /> </Data> </pre>	
(5) .sort_method	PASSED
<pre> <Data> <Enum Value="01" /> </Data> </pre>	
(6) .sort_object	PASSED
<pre> <Data> <Structure Qty="0004" > <LongUnsigned Value="0008" /> <OctetString Value="0000010000FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> </Data> </pre>	
(7) .entries_in_use	PASSED
<pre> <Data> <DoubleLongUnsigned Value="0000000D" /> </Data> </pre>	
(8) .profile_entries	PASSED
<pre> <Data> <DoubleLongUnsigned Value="000000F0" /> </Data> </pre>	

(24) .profile_entries	PASSED
<pre> <Data> <DoubleLongUnsigned Value="000000F0" /> </Data> </pre>	
Mngmt Get M-Bus Master Load profile for channel 4 0-4:24.3.0.255 (@1871)	
(25) .logical_name	PASSED
<pre> <Data> <OctetString Value="0004180300FF" /> </Data> </pre>	
(26) .buffer	PASSED
<pre> Earliest date: 01-FEB-2022 12:00:00, latest date: 30-AUG-2022 17:00:00 Middle date: 02-JUN-2022 01:00:00 </pre>	
(27) .capture_objects	PASSED
<pre> <Data> <Array Qty="0006" > <Structure Qty="0004" > <LongUnsigned Value="0008" /> <OctetString Value="0000010000FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> <Structure Qty="0004" > <LongUnsigned Value="0001" /> <OctetString Value="0004600A03FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> <Structure Qty="0004" > <LongUnsigned Value="0004" /> <OctetString Value="0004180201FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> <Structure Qty="0004" > <LongUnsigned Value="0004" /> <OctetString Value="0004180202FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> <Structure Qty="0004" > <LongUnsigned Value="0004" /> <OctetString Value="0004180203FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> <Structure Qty="0004" > <LongUnsigned Value="0004" /> <OctetString Value="0004180204FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> </Array> </Data> </pre>	
(28) .capture_period	PASSED
<pre> <Data> <DoubleLongUnsigned Value="00000E10" /> </Data> </pre>	
(29) .sort_method	PASSED
<pre> <Data> <Enum Value="01" /> </Data> </pre>	
(30) .sort_object	PASSED
<pre> <Data> <Structure Qty="0004" > <LongUnsigned Value="0008" /> <OctetString Value="0000010000FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> </Data> </pre>	
(31) .entries_in_use	PASSED
<pre> <Data> </pre>	


```

        <DoubleLongUnsigned Value="0000000D" />
    </Data>
(32) .profile_entries PASSED
    <Data>
        <DoubleLongUnsigned Value="000000F0" />
    </Data>

*****
Test Case 16 : Ext. M - M-Bus Control Logs, 40 item(s)
*****

Mngmt Get M-Bus Master Control log object 1 0-1:24.5.0.255 (@1941)
(1) .logical_name PASSED
    <Data>
        <OctetString Value="0001180500FF" />
    </Data>
(2) .buffer PASSED
    Earliest date: 10-NOV-2021 11:46:01, latest date: 14-NOV-2021 19:46:01
    Middle date: 12-NOV-2021 15:46:01
(3) .capture_objects PASSED
    <Data>
        <Array Qty="0002" >
            <Structure Qty="0004" >
                <LongUnsigned Value="0008" />
                <OctetString Value="0000010000FF" />
                <Integer Value="02" />
                <LongUnsigned Value="0000" />
            </Structure>
            <Structure Qty="0004" >
                <LongUnsigned Value="0001" />
                <OctetString Value="0001600B04FF" />
                <Integer Value="02" />
                <LongUnsigned Value="0000" />
            </Structure>
        </Array>
    </Data>
(4) .capture_period PASSED
    <Data>
        <DoubleLongUnsigned Value="00000000" />
    </Data>
(5) .sort_method PASSED
    <Data>
        <Enum Value="01" />
    </Data>
(6) .sort_object PASSED
    <Data>
        <Structure Qty="0004" >
            <LongUnsigned Value="0008" />
            <OctetString Value="0000010000FF" />
            <Integer Value="02" />
            <LongUnsigned Value="0000" />
        </Structure>
    </Data>
(7) .entries_in_use PASSED
    <Data>
        <DoubleLongUnsigned Value="00000005" />
    </Data>
(8) .profile_entries PASSED
    <Data>
        <DoubleLongUnsigned Value="00000064" />
    </Data>

Mngmt Get M-Bus Master Control log object 2 0-2:24.5.0.255 (@1952)
(9) .logical_name PASSED
    <Data>
        <OctetString Value="0002180500FF" />
    </Data>
(10) .buffer PASSED
    Earliest date: 10-NOV-2021 11:46:01, latest date: 14-NOV-2021 19:46:01
    Middle date: 12-NOV-2021 15:46:01
(11) .capture_objects PASSED
    <Data>
        <Array Qty="0002" >

```

```

        <Structure Qty="0004" >
            <LongUnsigned Value="0008" />
            <OctetString Value="0000010000FF" />
            <Integer Value="02" />
            <LongUnsigned Value="0000" />
        </Structure>
        <Structure Qty="0004" >
            <LongUnsigned Value="0001" />
            <OctetString Value="0002600B04FF" />
            <Integer Value="02" />
            <LongUnsigned Value="0000" />
        </Structure>
    </Array>
</Data>
(12) .capture_period PASSED
    <Data>
        <DoubleLongUnsigned Value="00000000" />
    </Data>
(13) .sort_method PASSED
    <Data>
        <Enum Value="01" />
    </Data>
(14) .sort_object PASSED
    <Data>
        <Structure Qty="0004" >
            <LongUnsigned Value="0008" />
            <OctetString Value="0000010000FF" />
            <Integer Value="02" />
            <LongUnsigned Value="0000" />
        </Structure>
    </Data>
(15) .entries_in_use PASSED
    <Data>
        <DoubleLongUnsigned Value="00000005" />
    </Data>
(16) .profile_entries PASSED
    <Data>
        <DoubleLongUnsigned Value="00000064" />
    </Data>
Mngmt Get M-Bus Master Control log object 3 0-3:24.5.0.255 (@1963)
(17) .logical_name PASSED
    <Data>
        <OctetString Value="0003180500FF" />
    </Data>
(18) .buffer PASSED
    Earliest date: 10-NOV-2021 11:46:01, latest date: 14-NOV-2021 19:46:01
    Middle date: 12-NOV-2021 15:46:01
(19) .capture_objects PASSED
    <Data>
        <Array Qty="0002" >
            <Structure Qty="0004" >
                <LongUnsigned Value="0008" />
                <OctetString Value="0000010000FF" />
                <Integer Value="02" />
                <LongUnsigned Value="0000" />
            </Structure>
            <Structure Qty="0004" >
                <LongUnsigned Value="0001" />
                <OctetString Value="0003600B04FF" />
                <Integer Value="02" />
                <LongUnsigned Value="0000" />
            </Structure>
        </Array>
    </Data>
(20) .capture_period PASSED
    <Data>
        <DoubleLongUnsigned Value="00000000" />
    </Data>
(21) .sort_method PASSED
    <Data>
        <Enum Value="01" />
    </Data>

```

(22)	.sort_object	PASSED
	<Data>	
	<Structure Qty="0004" >	
	<LongUnsigned Value="0008" />	
	<OctetString Value="0000010000FF" />	
	<Integer Value="02" />	
	<LongUnsigned Value="0000" />	
	</Structure>	
	</Data>	
(23)	.entries_in_use	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00000005" />	
	</Data>	
(24)	.profile_entries	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00000064" />	
	</Data>	
Mngmt Get M-Bus Master Control log object 4 0-4:24.5.0.255 (@1974)		
(25)	.logical_name	PASSED
	<Data>	
	<OctetString Value="0004180500FF" />	
	</Data>	
(26)	.buffer	PASSED
	Earliest date: 10-NOV-2021 11:46:01, latest date: 14-NOV-2021 19:46:01	
	Middle date: 12-NOV-2021 15:46:01	
(27)	.capture_objects	PASSED
	<Data>	
	<Array Qty="0002" >	
	<Structure Qty="0004" >	
	<LongUnsigned Value="0008" />	
	<OctetString Value="0000010000FF" />	
	<Integer Value="02" />	
	<LongUnsigned Value="0000" />	
	</Structure>	
	<Structure Qty="0004" >	
	<LongUnsigned Value="0001" />	
	<OctetString Value="0004600B04FF" />	
	<Integer Value="02" />	
	<LongUnsigned Value="0000" />	
	</Structure>	
	</Array>	
	</Data>	
(28)	.capture_period	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00000000" />	
	</Data>	
(29)	.sort_method	PASSED
	<Data>	
	<Enum Value="01" />	
	</Data>	
(30)	.sort_object	PASSED
	<Data>	
	<Structure Qty="0004" >	
	<LongUnsigned Value="0008" />	
	<OctetString Value="0000010000FF" />	
	<Integer Value="02" />	
	<LongUnsigned Value="0000" />	
	</Structure>	
	</Data>	
(31)	.entries_in_use	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00000005" />	
	</Data>	
(32)	.profile_entries	PASSED
	<Data>	
	<DoubleLongUnsigned Value="00000064" />	
	</Data>	
Mngmt Get M-Bus Event Log 0-0:99.98.3.255 (@1989)		
(33)	.logical_name	PASSED
	<Data>	
	<OctetString Value="0000636203FF" />	

</Data>		
(34)	.buffer Earliest date: 10-NOV-2021 11:46:01, latest date: 30-AUG-2022 13:13:27 Middle date: 13-NOV-2021 17:46:01	PASSED
(35)	.capture_objects	PASSED
<Data> <Array Qty="0002" > <Structure Qty="0004" > <LongUnsigned Value="0008" /> <OctetString Value="0000010000FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> <Structure Qty="0004" > <LongUnsigned Value="0001" /> <OctetString Value="0000600B03FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> </Array> </Data>		
(36)	.capture_period	PASSED
<Data> <DoubleLongUnsigned Value="00000000" /> </Data>		
(37)	.sort_method	PASSED
<Data> <Enum Value="01" /> </Data>		
(38)	.sort_object	PASSED
<Data> <Structure Qty="0004" > <LongUnsigned Value="0008" /> <OctetString Value="0000010000FF" /> <Integer Value="02" /> <LongUnsigned Value="0000" /> </Structure> </Data>		
(39)	.entries_in_use	PASSED
<Data> <DoubleLongUnsigned Value="00000006" /> </Data>		
(40)	.profile_entries	PASSED
<Data> <DoubleLongUnsigned Value="00000064" /> </Data>		
***** Test Case 17 : Ext. M - M-Bus Disconnect, 22 item(s) *****		
Mngmt Get M-Bus Master Disconnect control object 1 0-1:24.4.0.255 (@1882)		
(1)	.logical_name	PASSED
<Data> <OctetString Value="0001180400FF" /> </Data>		
(2)	.output_state	PASSED
<Data> <Boolean Value="01" /> </Data>		
(3)	.control_state	PASSED
<Data> <Enum Value="01" /> </Data>		
(4)	.control_mode	PASSED
<Data> <Enum Value="06" /> </Data>		
Mngmt Get M-Bus Master Disconnect control object 2 0-2:24.4.0.255 (@1890)		
(5)	.logical_name	PASSED
<Data> <OctetString Value="0002180400FF" />		

</Data>	
(6) .output_state	PASSED
<Data>	
<Boolean Value="01" />	
</Data>	
(7) .control_state	PASSED
<Data>	
<Enum Value="01" />	
</Data>	
(8) .control_mode	PASSED
<Data>	
<Enum Value="06" />	
</Data>	
Mngmt Get M-Bus Master Disconnect control object 3 0-3:24.4.0.255 (@1898)	
(9) .logical_name	PASSED
<Data>	
<OctetString Value="0003180400FF" />	
</Data>	
(10) .output_state	PASSED
<Data>	
<Boolean Value="01" />	
</Data>	
(11) .control_state	PASSED
<Data>	
<Enum Value="01" />	
</Data>	
(12) .control_mode	PASSED
<Data>	
<Enum Value="06" />	
</Data>	
Mngmt Get M-Bus Master Disconnect control object 4 0-4:24.4.0.255 (@1906)	
(13) .logical_name	PASSED
<Data>	
<OctetString Value="0004180400FF" />	
</Data>	
(14) .output_state	PASSED
<Data>	
<Boolean Value="01" />	
</Data>	
(15) .control_state	PASSED
<Data>	
<Enum Value="01" />	
</Data>	
(16) .control_mode	PASSED
<Data>	
<Enum Value="06" />	
</Data>	
Mngmt Get M-Bus Disconnect control scheduler 0-1:15.0.1.255 (@1914)	
(17) .logical_name	PASSED
<Data>	
<OctetString Value="00010F0001FF" />	
</Data>	
(18) .executed_script	PASSED
<Data>	
<Structure Qty="0002" >	
<OctetString Value="00010A006AFF" />	
<LongUnsigned Value="0001" />	
</Structure>	
</Data>	
(19) .type	PASSED
<Data>	
<Enum Value="01" />	
</Data>	
(20) .execution_time	PASSED
<Data>	
<Array Qty="0001" >	
<Structure Qty="0002" >	
<OctetString Value="FFFFFFFF" />	
<OctetString Value="FFFFFFFF" />	
</Structure>	

```

    </Array>
  </Data>

Mngmt Get M-Bus Disconnecter script table 0-1:10.0.106.255 (@1920)
(21) .logical_name PASSED
  <Data>
    <OctetString Value="00010A006AFF" />
  </Data>
(22) .scripts PASSED
  <Data>
    <Array Qty="0010" >
      <Structure Qty="0002" >
        <LongUnsigned Value="0001" />
        <Array Qty="0001" >
          <Structure Qty="0005" >
            <Enum Value="01" />
            <LongUnsigned Value="0046" />
            <OctetString Value="0001180400FF" />
            <Integer Value="03" />
            <Enum Value="02" />
          </Structure>
        </Array>
      </Structure>
      <Structure Qty="0002" >
        <LongUnsigned Value="0002" />
        <Array Qty="0001" >
          <Structure Qty="0005" >
            <Enum Value="01" />
            <LongUnsigned Value="0046" />
            <OctetString Value="0001180400FF" />
            <Integer Value="03" />
            <Enum Value="01" />
          </Structure>
        </Array>
      </Structure>
      <Structure Qty="0002" >
        <LongUnsigned Value="0003" />
        <Array Qty="0001" >
          <Structure Qty="0005" >
            <Enum Value="01" />
            <LongUnsigned Value="0046" />
            <OctetString Value="0002180400FF" />
            <Integer Value="03" />
            <Enum Value="02" />
          </Structure>
        </Array>
      </Structure>
      <Structure Qty="0002" >
        <LongUnsigned Value="0004" />
        <Array Qty="0001" >
          <Structure Qty="0005" >
            <Enum Value="01" />
            <LongUnsigned Value="0046" />
            <OctetString Value="0002180400FF" />
            <Integer Value="03" />
            <Enum Value="01" />
          </Structure>
        </Array>
      </Structure>
      <Structure Qty="0002" >
        <LongUnsigned Value="0005" />
        <Array Qty="0001" >
          <Structure Qty="0005" >
            <Enum Value="01" />
            <LongUnsigned Value="0046" />
            <OctetString Value="0003180400FF" />
            <Integer Value="03" />
            <Enum Value="02" />
          </Structure>
        </Array>
      </Structure>
      <Structure Qty="0002" >
        <LongUnsigned Value="0006" />

```

```

<Array Qty="0001" >
  <Structure Qty="0005" >
    <Enum Value="01" />
    <LongUnsigned Value="0046" />
    <OctetString Value="0003180400FF" />
    <Integer Value="03" />
    <Enum Value="01" />
  </Structure>
</Array>
</Structure>
<Structure Qty="0002" >
  <LongUnsigned Value="0007" />
  <Array Qty="0001" >
    <Structure Qty="0005" >
      <Enum Value="01" />
      <LongUnsigned Value="0046" />
      <OctetString Value="0004180400FF" />
      <Integer Value="03" />
      <Enum Value="02" />
    </Structure>
  </Array>
</Structure>
<Structure Qty="0002" >
  <LongUnsigned Value="0008" />
  <Array Qty="0001" >
    <Structure Qty="0005" >
      <Enum Value="01" />
      <LongUnsigned Value="0046" />
      <OctetString Value="0004180400FF" />
      <Integer Value="03" />
      <Enum Value="01" />
    </Structure>
  </Array>
</Structure>
<Structure Qty="0002" >
  <LongUnsigned Value="0009" />
  <Array Qty="0001" >
    <Structure Qty="0005" >
      <Enum Value="02" />
      <LongUnsigned Value="0046" />
      <OctetString Value="0001180400FF" />
      <Integer Value="01" />
      <Enum Value="00" />
    </Structure>
  </Array>
</Structure>
<Structure Qty="0002" >
  <LongUnsigned Value="000A" />
  <Array Qty="0001" >
    <Structure Qty="0005" >
      <Enum Value="02" />
      <LongUnsigned Value="0046" />
      <OctetString Value="0001180400FF" />
      <Integer Value="02" />
      <Enum Value="00" />
    </Structure>
  </Array>
</Structure>
<Structure Qty="0002" >
  <LongUnsigned Value="000B" />
  <Array Qty="0001" >
    <Structure Qty="0005" >
      <Enum Value="02" />
      <LongUnsigned Value="0046" />
      <OctetString Value="0002180400FF" />
      <Integer Value="01" />
      <Enum Value="00" />
    </Structure>
  </Array>
</Structure>
<Structure Qty="0002" >
  <LongUnsigned Value="000C" />
  <Array Qty="0001" >

```

```

<Structure Qty="0005" >
  <Enum Value="02" />
  <LongUnsigned Value="0046" />
  <OctetString Value="0002180400FF" />
  <Integer Value="02" />
  <Enum Value="00" />
</Structure>
</Array>
</Structure>
<Structure Qty="0002" >
  <LongUnsigned Value="000D" />
  <Array Qty="0001" >
    <Structure Qty="0005" >
      <Enum Value="02" />
      <LongUnsigned Value="0046" />
      <OctetString Value="0003180400FF" />
      <Integer Value="01" />
      <Enum Value="00" />
    </Structure>
  </Array>
</Structure>
<Structure Qty="0002" >
  <LongUnsigned Value="000E" />
  <Array Qty="0001" >
    <Structure Qty="0005" >
      <Enum Value="02" />
      <LongUnsigned Value="0046" />
      <OctetString Value="0003180400FF" />
      <Integer Value="02" />
      <Enum Value="00" />
    </Structure>
  </Array>
</Structure>
<Structure Qty="0002" >
  <LongUnsigned Value="000F" />
  <Array Qty="0001" >
    <Structure Qty="0005" >
      <Enum Value="02" />
      <LongUnsigned Value="0046" />
      <OctetString Value="0004180400FF" />
      <Integer Value="01" />
      <Enum Value="00" />
    </Structure>
  </Array>
</Structure>
<Structure Qty="0002" >
  <LongUnsigned Value="0010" />
  <Array Qty="0001" >
    <Structure Qty="0005" >
      <Enum Value="02" />
      <LongUnsigned Value="0046" />
      <OctetString Value="0004180400FF" />
      <Integer Value="02" />
      <Enum Value="00" />
    </Structure>
  </Array>
</Structure>
</Array>
</Data>

```

 Test Case 18 : FIT Push, 3 item(s)

(1) Push on installation	PASSED
(2) Push on alarm	PASSED
(3) Push on power down	
INAPPLICABLE	
Push setup on power down not available	

 Test Case 19 : FIT Miscellaneous, 4 item(s)

(1) Disconnecter Script Table	PASSED
-------------------------------	--------


```

(2) Load profile with period 1 DST ambiguity          PASSED
(3) Load profile power down withing one period       PASSED
(4) Load profile power down over two periods         PASSED

*****
* CTI *
*****

// Conformance Test Information (CTI) Template
// 2.3

Manufacturer = {
  Name = '\Smart Metering Solutions (Changsha) Co., Ltd.'
  ThreeLettersId = '\SMS'
}

DeviceUnderTest = {
  Type = 'IM351'
  IDISDeviceType = 103
  IDISFunctionType = [Extension_D, Extension_L, Extension_M]
  SerialNr = 03684408
  IPVersion = IPv6
  DataLinkLayer = G3
  ConsumerInformationPush = FALSE
  EUI64Address = "386E21FFFE383838"

  SMSSupported = FALSE
  ClipCallSupported = FALSE
}

TestOptions = {
  PushDestination = '\[fe80:0:0:0:781d:ff:fe00:0]:61616'
}

ObjectModel = {

  // Optional objects implemented
  OptionalObjects = ''

  //Class 91 attribute 5.
  InstanceExtraInfo = {
    // G3-PLC MAC Setup (1277)
    LogicalName = '0-0:29.1.0.255'
    ClassId = 91
    AttributeExtraInfo = {
      //mac_key_table
      AttributeId = 5
      SetData = '\<Data>'
+      <Array Qty="01" >'
+      <Structure Qty="02" >'
+      <Unsigned Value="00" />'
+      <OctetString Value="AF4D6DCCF14DE7C1C4235E6FEF6C151F" />'
+      </Structure>'
+      </Array>'
+      </Data>'

    }
  }

  // Set value for Consumer Message Text
  InstanceExtraInfo = {
    LogicalName = '0-0:96.13.0.255'
    ClassId = 1
    AttributeExtraInfo = {
      AttributeId = 2
      SetData = '\<Data><OctetString Value="3132333435363738" /></Data>'
    }
  }

  InstanceExtraInfo = {
    LogicalName = '0-0:1.0.0.255'
    ClassId = 8

```

```

AttributeExtraInfo = {
    AttributeId = 2
    SetData = '\<Data><OctetString Value="07E6081EFF10000FF8000FF" /></Data>' // yyyy mm
dd dow hh mm ss
}
}

InstanceExtraInfo = {
// Set special days to 30 entries
LogicalName = '0-0:11.0.0.255'
ClassId = 11
AttributeExtraInfo = {
    AttributeId = 2
    SetData = '\<Data>'
+'    <Array Qty="1E" >'
+'        <Structure Qty="03" >'
+'            <LongUnsigned Value="0001" />'
+'            <OctetString Value="FFFF0101FF" />'
+'            <Unsigned Value="02" />'
+'        </Structure>'
+'        <Structure Qty="03" >'
+'            <LongUnsigned Value="0002" />'
+'            <OctetString Value="FFFF0102FF" />'
+'            <Unsigned Value="02" />'
+'        </Structure>'
+'        <Structure Qty="03" >'
+'            <LongUnsigned Value="0003" />'
+'            <OctetString Value="FFFF0103FF" />'
+'            <Unsigned Value="02" />'
+'        </Structure>'
+'        <Structure Qty="03" >'
+'            <LongUnsigned Value="0004" />'
+'            <OctetString Value="FFFF0104FF" />'
+'            <Unsigned Value="02" />'
+'        </Structure>'
+'        <Structure Qty="03" >'
+'            <LongUnsigned Value="0005" />'
+'            <OctetString Value="FFFF0105FF" />'
+'            <Unsigned Value="02" />'
+'        </Structure>'
+'        <Structure Qty="03" >'
+'            <LongUnsigned Value="0006" />'
+'            <OctetString Value="FFFF0106FF" />'
+'            <Unsigned Value="02" />'
+'        </Structure>'
+'        <Structure Qty="03" >'
+'            <LongUnsigned Value="0007" />'
+'            <OctetString Value="FFFF0107FF" />'
+'            <Unsigned Value="02" />'
+'        </Structure>'
+'        <Structure Qty="03" >'
+'            <LongUnsigned Value="0008" />'
+'            <OctetString Value="FFFF0108FF" />'
+'            <Unsigned Value="02" />'
+'        </Structure>'
+'        <Structure Qty="03" >'
+'            <LongUnsigned Value="0009" />'
+'            <OctetString Value="FFFF0109FF" />'
+'            <Unsigned Value="02" />'
+'        </Structure>'
+'        <Structure Qty="03" >'
+'            <LongUnsigned Value="000A" />'
+'            <OctetString Value="FFFF010AFF" />'
+'            <Unsigned Value="02" />'
+'        </Structure>'
+'        <Structure Qty="03" >'
+'            <LongUnsigned Value="000B" />'
+'            <OctetString Value="FFFF0201FF" />'
+'            <Unsigned Value="02" />'
+'        </Structure>'
+'        <Structure Qty="03" >'
+'            <LongUnsigned Value="000C" />'
+'            <OctetString Value="FFFF0202FF" />'

```

```

+'          <Unsigned Value="02" />'
+'        </Structure>'
+'      <Structure Qty="03" >'
+'        <LongUnsigned Value="000D" />'
+'        <OctetString Value="FFFF0203FF" />'
+'        <Unsigned Value="02" />'
+'      </Structure>'
+'    <Structure Qty="03" >'
+'      <LongUnsigned Value="000E" />'
+'      <OctetString Value="FFFF0204FF" />'
+'      <Unsigned Value="02" />'
+'    </Structure>'
+'  <Structure Qty="03" >'
+'    <LongUnsigned Value="000F" />'
+'    <OctetString Value="FFFF0205FF" />'
+'    <Unsigned Value="02" />'
+'  </Structure>'
+' <Structure Qty="03" >'
+'   <LongUnsigned Value="0010" />'
+'   <OctetString Value="FFFF0206FF" />'
+'   <Unsigned Value="02" />'
+' </Structure>'
+' <Structure Qty="03" >'
+'   <LongUnsigned Value="0011" />'
+'   <OctetString Value="FFFF0207FF" />'
+'   <Unsigned Value="02" />'
+' </Structure>'
+' <Structure Qty="03" >'
+'   <LongUnsigned Value="0012" />'
+'   <OctetString Value="FFFF0208FF" />'
+'   <Unsigned Value="02" />'
+' </Structure>'
+' <Structure Qty="03" >'
+'   <LongUnsigned Value="0013" />'
+'   <OctetString Value="FFFF0209FF" />'
+'   <Unsigned Value="02" />'
+' </Structure>'
+' <Structure Qty="03" >'
+'   <LongUnsigned Value="0014" />'
+'   <OctetString Value="FFFF020AFF" />'
+'   <Unsigned Value="02" />'
+' </Structure>'
+' <Structure Qty="03" >'
+'   <LongUnsigned Value="0015" />'
+'   <OctetString Value="FFFF0301FF" />'
+'   <Unsigned Value="02" />'
+' </Structure>'
+' <Structure Qty="03" >'
+'   <LongUnsigned Value="0016" />'
+'   <OctetString Value="FFFF0302FF" />'
+'   <Unsigned Value="02" />'
+' </Structure>'
+' <Structure Qty="03" >'
+'   <LongUnsigned Value="0017" />'
+'   <OctetString Value="FFFF0303FF" />'
+'   <Unsigned Value="02" />'
+' </Structure>'
+' <Structure Qty="03" >'
+'   <LongUnsigned Value="0018" />'
+'   <OctetString Value="FFFF0304FF" />'
+'   <Unsigned Value="02" />'
+' </Structure>'
+' <Structure Qty="03" >'
+'   <LongUnsigned Value="0019" />'
+'   <OctetString Value="FFFF0305FF" />'
+'   <Unsigned Value="02" />'
+' </Structure>'
+' <Structure Qty="03" >'
+'   <LongUnsigned Value="001A" />'
+'   <OctetString Value="FFFF0306FF" />'
+'   <Unsigned Value="02" />'
+' </Structure>'
+' <Structure Qty="03" >'

```



```

        CipherringStyle = GENERAL
    }
}

LocalSecurityElements = {
    Public = {
        ContextName = LONG_NAMES
        MechanismName = LOWEST_LEVEL_SECURITY
        Policy = NO_SECURITY
    }
    Management = {
        ContextName = LONG_NAMES
        MechanismName = LOW_LEVEL_SECURITY
        Policy = NO_SECURITY
        Password = '\12345678'
    }
    PreEstablished = {
        Policy = NO_SECURITY
        ServerMaxReceivePduSize = 1200
        CipherringStyle = GENERAL
    }
}

SMSSEcurityElements = {
    PreEstablished = {
        Policy = AUTHENTICATION_AND_ENCRYPTION
        ServerMaxReceivePduSize = 138
        CipherringStyle = GENERAL
    }
}

HDLCProfile = {
    PhysicalLayer = {
        OpeningMode = DIRECT_HDLC
        HdlcBaud = 9600
    }
    DataLinkLayer = {
        InactivityTimeout = 180000
        InterFrameTimeout = 150
        ResponseTimeout = 3000
        DISCToNDMTimeout = 3000
        AddressingSchemes = [FOUR_BYTES_ADDRESSING]
        ServerLowerMACAddress = 17
    }
}

TCPProfile = {
    ServerTCPPort = 4059
    ResponseTimeout = 10000
    ConnectTimeout = 5000
    DisconnectToConnectDelay = 3000
}

G3PLCProfile = {
    ResponseTimeout = 30000
    FrequencyBand = CENELEC_A
    ConnectTimeout = 20000
    UDPPort = 61616
    PSK = "DBC142BB124A2AAA125D67FF418368D5"
}

// END CTI_Template

*****
* Miscellaneous *
*****

TestMode:                G3-PLC
Test Plan Signature:     BFC18D5882976F2087BC007B67CDC246
Object Model:           IDIS-S02-002 - object model Pack2 Ed2.0 - V2.29 (20200831)-FIT MBUS
Tests G350 (CorrectedAndValve status).xlsx
DUT system title:       534D536770383838

```

Fit #91

Device:SMSC IM351

DNV-GL,Arnhem, Netherlands, 30.08.2022

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Run number:	1924
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